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Duthie's Planting Guide for 1948

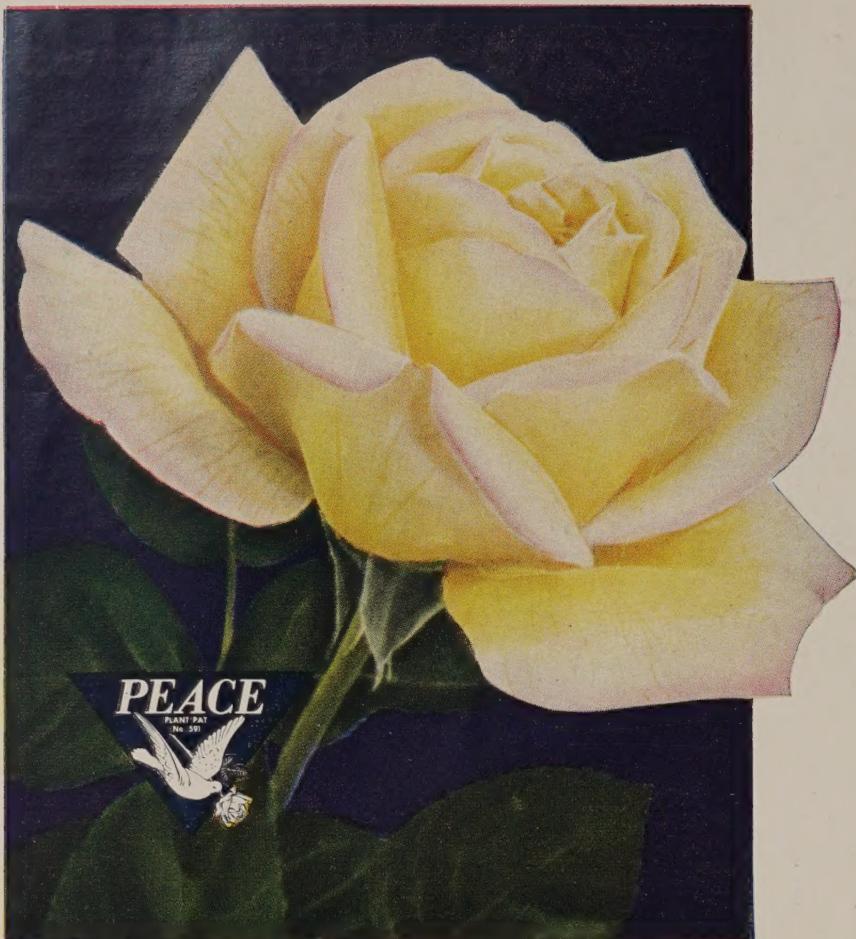


"Our Seeds Grow Friends"

# DUTHIE SEED COMPANY

510 MAIN AVE. - SPOKANE 5, WASHINGTON

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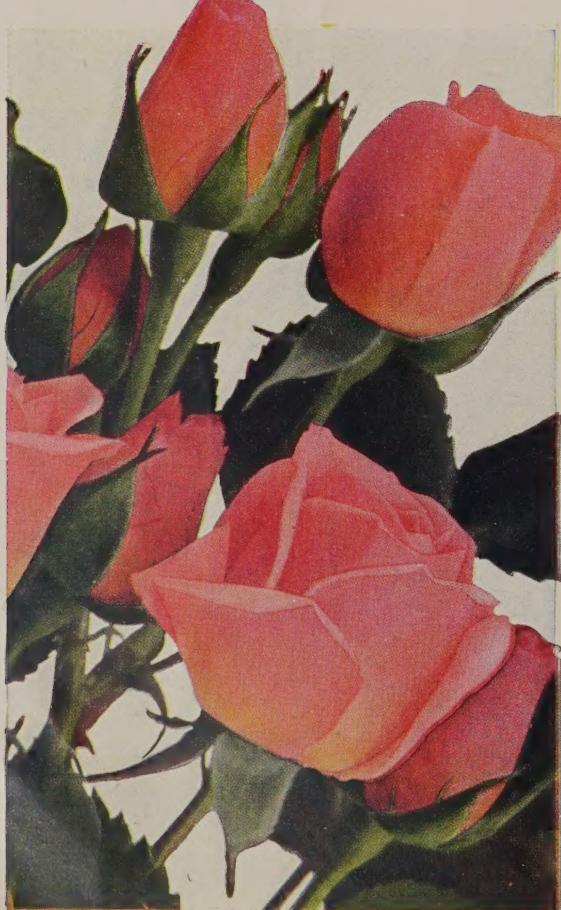


PEACE (Plant Patent No. 591)  
\$2.00 each



MARY MARGARET McBRIDE  
(Plant Patent No. 537)  
\$1.50 each

For Complete List of Roses  
See Page 31

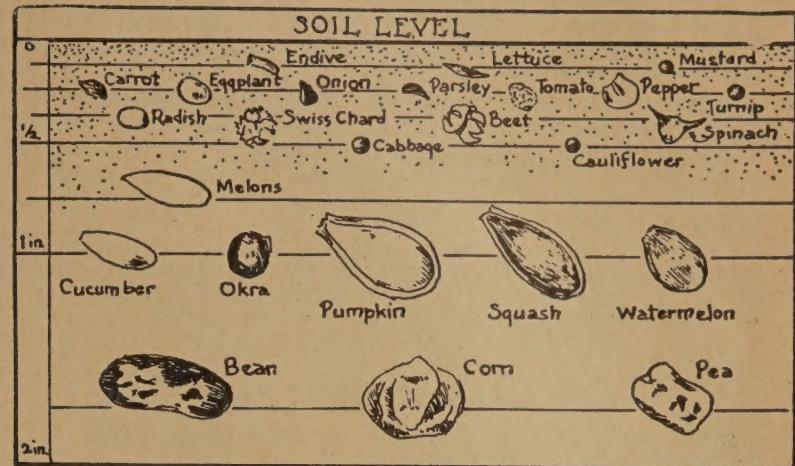


COPYRIGHT  
PINOCCHIO (Plant Patent No. 484)  
\$1.25 each



RUBAIYAT (Patent Pending)  
All America Selection 1947  
\$2.00 each

# Helpful Hints on Growing Vegetables



## SPRAY AND DUST FOR PESTS

Insects and diseases may infest the vegetable garden but may never become a serious problem if one watches for evidence of damage and takes prompt action. Sprays and dusts are available in convenient packages to combat every garden pest. When spraying cover all parts of the plant and both sides of the leaves. Do a thorough job promptly and avoid a serious infestation.

Success in gardening starts by following certain rules. Whether these be noted from the pages of books or gathered from practical experience makes little difference. The process is the same. Good seed, soil, water, fertilizer, and work makes for success.

If we understand that almost every seed we sow has stored within its shell the ability to sprout and grow into a useful plant we can easily think of seeds as plants ready to set out which will make the picture of the finished garden clearer in our mind's eye thus avoiding many of the early mistakes of planting.

Seeds are started by sowing in the soil of the garden. There germination takes place readily when conditions required for growth are met. Fortunately good garden soil, well prepared meets these requirements: soil moisture, usually present after winter rains or supplied by irrigation; soil temperature, heat from the sun and the main reason why certain tender seeds should be delayed in sowing (until the ground is warm), and air and moisture drainage supplied by the hard work of soil

preparation which we have been recommending. As far as fertilizer is concerned young seedlings don't need extra feeding until they have used up the stored food of the cotyledons. It is better to delay feeding until growth is well started and then apply gradually. This is in addition to the humus (manure, peat, compost, etc.) and phosphate and other fertilizers put into the soil at the time of preparation. They are deeper down and can be reached by the plants as they grow.

By thinking of the seeds as plants we will sow them far enough apart to reduce drastic thinning. We wouldn't set plants out very close because before long we would not have much of a garden, competition between the plants would reduce the flowers, fruit and shape of the individual plants to an undesired minimum. In both vegetable and flower gardens we strive for perfection in either flowers, fruits or foliage—poor quality is seldom tolerated.

Actually every seed we sow will not germinate. Not from poor quality, but more often because other factors more difficult to control affect the seed. Among these are water, in excess, which may either wash the seeds out altogether or cover them more than they should be to sprout. (See planting chart). Crows and rodents may eat some. Soil fungi and very wet soils before germination may cause many to rot. So we usually sow seeds thicker than needed and thin the row later on to a spacing that allows the desired growth.

The planting chart below contains suggestions to enable proper planning of the garden. However, most varieties used in the small home garden are best sown in smaller rows for which a packet each will usually suffice. Replanting to prolong the season of short maturing crops is a splendid idea and makes maximum use of the prepared soil.

## QUANTITY OF SEED AND SPACING FOR HOME AND MARKET GARDENS

VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows	Distance apart in row planting inches	Depth inches	VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows	Distance apart in row planting inches	Depth inches
Artichoke, Globe	1/4 oz.	6 to 8 oz.	40 to 48	18 to 24	1	Kohl Rabi	1/4 oz.	4 to 5 lbs.	14 to 24	4 to 6	1/2
Asparagus	1/2 oz.	4 lbs.	14 to 24	3 to 6	1	Leek	1/4 oz.	4 lbs.	14 to 36	2 to 3	1/4
Beans, Bush	1/2 lb.	50 to 60 lbs.	24 to 30	2 to 3	1 1/2 to 2	Lettuce	1/4 oz.	3 lbs.	12 to 18	4 to 12	1/4
Beans, Lima	1/2 lb.	30 to 50 lbs.	24 to 36	3 to 6	1 1/2 to 2	Melon, Musk	1/2 oz.	3 to 4 lbs.	70 to 80	36 to 60	3/4
Beans, Pole	1/2 lb.	80 to 35 lbs.	36 to 48	6 to 8	1 1/2 to 2	Melon, Water	1/2 oz.	3 to 4 lbs.	72 to 96	72 to 96	3/4
Beet	1/2 oz.	8 to 14 lbs.	14 to 24	3 to 4	1/2 to 1	Mustard	1/4 oz.	4 lbs.	14 to 24	6 to 9	1/2
Beet, Mangold & Sugar	1/2 oz.	6 to 10 lbs.	18 to 24	6 to 9	1/2 to 1	Okra	1 oz.	8 to 10 lbs.	24 to 40	18 to 24	1
Swiss Chard	1/2 oz.	6 to 10 lbs.	18 to 24	10 to 12	1	Onion	1/4 oz.	3 to 4 lbs.	18 to 24	3 to 4	3/4
Broccoli	1/4 oz.	4 oz.	20 to 36	16 to 22	1/2 to 1	Onion (for sets)	60 oz.	80 to 85 lbs.	12 to 14	Not thin'd	3/4
Brussels Sprouts	1/4 oz.	4 oz.	20 to 36	16 to 22	1/2 to 3/4	Parsnip	1/2 oz.	3 to 4 lbs.	18 to 24	3 to 4	1/2
Cabbage	1/4 oz.	4 oz.	18 to 36	14 to 24	1/2	Parsley	1/4 oz.	3 to 4 lbs.	12 to 20	6 to 8	1/2
Cardoon	1/2 oz.	5 oz.	20 to 32	20 to 30	1/2 to 1	Peas	3/4 lb.	90 to 180 lbs.	24 to 36	1 to 2	1 to 2
Carrot	1/4 oz.	3 to 4 lbs.	16 to 24	1 to 3	1/2	Pepper	1/8 oz.	1 to 2 lbs.	20 to 30	18 to 29	1/2
Cauliflower	1/4 oz.	4 oz.	24 to 30	20 to 24	1/2	Potatoes	8 lbs.	800-1000	24 to 36	18 to 24	6
Celery	1/8 oz.	4 oz.	24 to 30	4 to 6	1/4	Pumpkin	2 oz.	3 to 4 lbs.	96 to 110	60 to 84	3/4
Chicory	1/2 oz.	4 to 5 lbs.	20 to 36	2 to 3	1/2 to 1	Radish	1/6 oz.	10 to 12 lbs.	12 to 18	1 to 2	1/4
Collard	1/4 oz.	5 oz.	24 to 30	14 to 18	1/2	Rhubarb	1/2 oz.	3 lbs.	24 to 42	20 to 24	3/4
Corn, Pop	3 oz.	6 to 8 lbs.	34 to 40	6 to 8	1	Rutabaga	1/2 oz.	2 to 4 lbs.	18 to 24	4 to 7	1/2
Corn, Sweet	4 oz.	10 to 12 lbs.	30 to 42	9 to 12	1	Sage	1/2 oz.	4 to 5 lbs.	20 to 24	6 to 10	1/2
Corn Salad	2 oz.	10 to 12 lbs.	14 to 18	3 to 4	3/4	Salsify	3/4 oz.	7 to 8 lbs.	18 to 24	2 to 3	3/4
Cress	1 oz.	10 lbs.	12 to 18	2 to 4	1/2	Sorrel	1/2 oz.	4 to 5 lbs.	18 to 22	2 to 3	1/2
Cucumber	1/2 oz.	3 to 4 lbs.	48 to 60	12 to 36	1/2 to 3/4	Spinach	3/4 oz.	10 to 20 lbs.	14 to 18	3 to 5	3/4
Dandelion	1/4 oz.	5 to 6 lbs.	18 to 22	6 to 10	1/2	Squash, Bush	1 oz.	4 to 6 lbs.	42 to 48	42 to 48	1
Dill	1/2 oz.	5 lbs.	20 to 36	4 to 6	1/2	Squash, Vining	1 oz.	4 lbs.	72 to 90	60 to 90	1
Egg Plant	1/8 oz.	5 to 6 oz.	24 to 36	18 to 24	1/2	Sunflower	1 oz.	7 to 8 lbs.	48 to 70	10 to 12	1
Endive	1/2 oz.	4 to 5 lbs.	18 to 24	8 to 12	1/2	Tomato	2 oz.	40 to 60	36 to 40	1/2	
Fennel	1/2 oz.	3 to 4 lbs.	24 to 32	5 to 8	3/4	Tobacco	2 oz.	36 to 48	24 to 36	1/2	
Kale	1/2 oz.	4 to 5 lbs.	24 to 32	14 to 22	1/2	Turnip	1/2 oz.	2 to 3 lbs.	12 to 20	2 to 4	1/2

## WHAT AND HOW TO PLANT

In selecting vegetables to plant include the ones your family should eat as well as the kinds they like. A well balanced diet is most important and should include green vegetables, yellow vegetables, leafy vegetables, root vegetables, and tomatoes.

Leafy or green vegetables for crisp salads. These are rich in vitamins and minerals.

Root vegetables, beets, carrots, turnips and onions, all rich in health-giving vitamins.

Vine vegetables—peas, beans, cucumbers, on the fence or trellis. The heavy-fruited types like vine squash, and pumpkin, should be grown on the ground as always, among the corn to save space.

Flowers to compliment the vegetables. Morale does not stop with the stomach. Flowers for the house, fresh from the garden, are essential. Plant them, as shown, on the plan to make the view from the house attractive and colorful.

## SOW SEEDS AT RIGHT TIME

Sow seeds at the proper season and avoid waste. We have the highest quality seeds available.

Work down the top soil with a rake until it is level, fine and in perfect physical condition, before attempting to plant seed.

Seed should be sown thinly in shallow rills, made with a stick as shown in the sketch. To make the rows straight, follow a line of string stretched between stakes placed at either end of the row. The depth of this rill depends on the variety sown. Check with the depth of planting chart on page 21 before sowing seed.

Seed may be sown directly from the packet, or by rubbing a pinch of seed between the thumb and the first two fingers. This latter method gives a thinner distribution of the seed. Small seeds should not be thicker than 10 to the inch. Sow one row at a time and after each row, cover the seed lightly, touching the loose soil with a rake. Place the board used for walking between the rows on top of the sown seed and walk across it to firm the soil for better germination.

Treatment of the seed with "Cuprocid" will eliminate a great deal of damping off, and rotting of the seed after sowing, especially if sown during the wet weather.

If the soil is moist, but not wet, at the time of sowing, watering will not be necessary before the seedlings are up. If it dries out, however, sprinkle carefully so as not to wash out the small seedlings.

## USE PLENTY OF GOOD FERTILIZER

Fertilizers are very important. The food value of garden vegetables for human consumption depends greatly on their mineral content, derived from the soil. The vitamin content depends on the vigor of growth and the abundance of sunlight. Therefore the fertilizing of the soil is important to insure vigorous growth and healthy mineral and vitamin-rich vegetables. A good practice is to spade commercial fertilizer, balanced to supply the necessary proportions of nitrogen, phosphorus and potash. Later in the season, applications of fertilizers in small doses, as side dressings, keep vegetables in active growth. Ask us for special fertilizer formulas for vegetable gardens.

## WATERING IS IMPORTANT

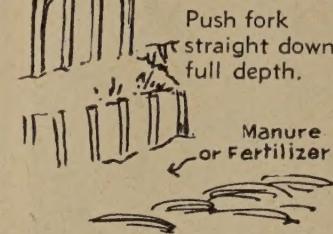
Watering will be necessary during the growing season. It should be done early enough in the day to evaporate drops of water from the leaves before nightfall. Water generously, soaking the soil deeply each time, rather than by quick "sprinkles" with the hose. In this way, the roots will grow deep, feed better and be protected from drought, in case watering is missed during a hot dry spell. Once every week or ten days should be ample for most soils. No rules can be formulated to determine the necessity of watering. Observation of the soil, and testing with a shovel, will best determine when to water.

## CULTIVATE OFTEN

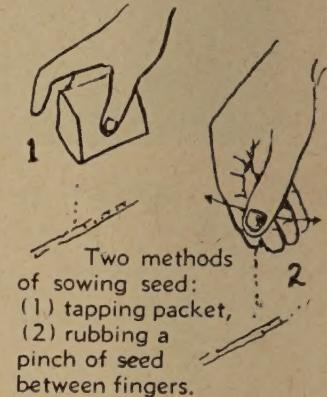
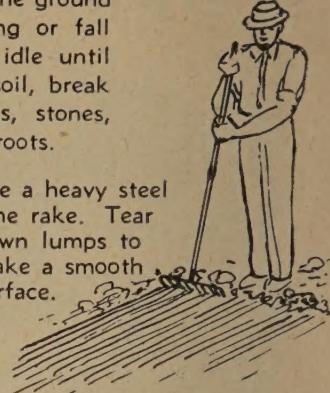
To conserve moisture and promote growth of plants, give a complete cultivation of the surface soil the day following each rain or watering. Be careful not to go deep in the soil, else the roots will be injured. Most plants benefit by frequent and regular cultivation. Beans and peas, however, need only a light cultivation until they begin to set flowers, when further cultivation may cause the buds to drop and reduce the crop.

## SPADING THE SOIL

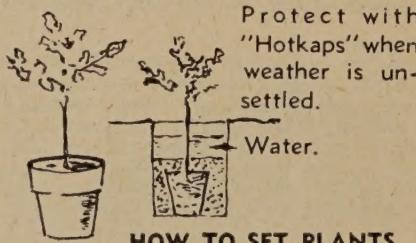
This operation may be done as soon as the ground is workable in spring or fall and allowed to lie idle until spring. Turn over soil, break clods, remove sticks, stones, and perennial weed roots.



Use a heavy steel tine rake. Tear down lumps to make a smooth surface.



Plants are safer and easier to use for tomato (sketch), pepper, cauliflower, eggplant, celery and cabbage. Select vigorous plants properly hardened to resist cool weather.



## HOW TO SET PLANTS



## SPRAY AND DUST FOR PESTS

Insects and diseases may infest the vegetable garden but may never become a serious problem if one watches for evidence of damage and takes prompt action. Sprays and dusts are available in convenient packages to combat every garden pest. When spraying cover all parts of the plant and both sides of the leaves. Do a thorough job promptly and avoid a serious infestation.

## SPACE SAVING IN THE VEGETABLE GARDEN

Simple expedients that save space in the garden and make better vegetables are always helpful to the home gardener. The average plan will call for the easier kinds: beets, carrots, swiss chard, leaf lettuce, onions and corn, all of which can be grown in small gardens. A few others, requiring a larger space, can be grown by training on poles, trellises, or fences, thus utilizing a minimum of soil space.

Other quick maturing kinds can be grown between rows of the slower growing, and longer maturing kinds, or even between the plants in the row. The ground then does double duty, and it is therefore quite essential to fertilize the soil in order to support these extra crops and to watch the watering more carefully for the demands of the garden will be greater.

Try a few of these methods—save the extra effort of a larger garden by intensively working a smaller area.



## VEGETABLE SEEDS

### ASPARAGUS

1 oz. to 100 ft., 4 lbs. per acre

Soak the seed for 24 hours before planting to insure more rapid and certain germination. Sow in spring in rows about 18 inches apart, allowing 15 to 20 seeds to the foot. Cover 2 inches deep. When plants are well established, thin to about an inch apart. Hoe frequently during the summer. Set in a permanent bed the following spring.

**MARY WASHINGTON.** Shoots slightly oval in shape, firm and tender and richly flavored. Pkt. 10c.

### DWARF OR BUSH BEANS

One pound will plant a row 100 feet long;  
about 1 1/4 bushels to the acre

#### BUSH, GREEN POD

Price: Pkt. 15c; 1/2 lb. 25c; 1 lb. 45c

**DWARF HORTICULTURAL.** Particularly desirable green shell and snap sort for home and market garden. Plant medium small, thrifty and productive. Pods dark green at snap stage, becoming greenish yellow splashed with carmine. 5 to 5 1/2 inches long. Strictly stringless, slightly fibrous. Seeds plump oval, pinkish buff, spotted and streaked with purplish red.

**IMPROVED STRINGLESS GREEN POD.** High quality for home and market garden. Plant large, thrifty, heavily productive. Pods medium green, 5 1/2 inches long, almost 1/2 inch wide and equally thick. Very fleshy, strictly stringless, fine grained, tender. Seeds coffee brown.

**TENDERGREEN.** This is a new bush bean of utmost value. The plants make a strong and vigorous growth. They are well branched and carry a great quantity of beautiful light green beans. The pods grow 6 to 7 inches long. They are round, extremely meaty, and tender. Even when fully grown they are absolutely stringless.

**GIANT STRINGLESS.** Long stringless green pods. A few days later than Tendergreen but more productive and with longer, straighter pods. The pods are large and nearly round.

**NAVY BEANS.** Matures in 90 days. This is the favored dry bean for baking and for soups. Very small, seed pure white, vines thrifty and very productive.

**HOW TO GROW DWARF OR BUSH BEANS.** Make the rows 18 inches or 2 feet apart, and drop the beans 4 inches apart in the row. If the soil is warm and loose, plant 2 inches deep; if rather cold and wet, plant only one inch deep. Beans, especially the yellow-podded varieties, will rot very easily if planted when the soil is wet and the atmosphere is cold. If you do not want to run the risk of replanting them, do not plant your beans until the soil is warm. Cultivate often but never when the plants are wet, as this brings on rust. Pick the beans as fast as they become fit to use; this makes them bear longer. Special prices to market gardeners. Send your list to us for prices.



BUSH BEANS, TENDERGREEN

## BUSH, WAX POD

**TOP NOTCH GOLDEN WAX.** New blight resistant. A splendid home garden and canning variety. Plant small, productive. Pods very attractive; golden yellow; 4½ to 5 inches long, ½ inch wide, thick, oval; fleshy, brittle, stringless. Seeds white, splashed with violet carmine and purple.

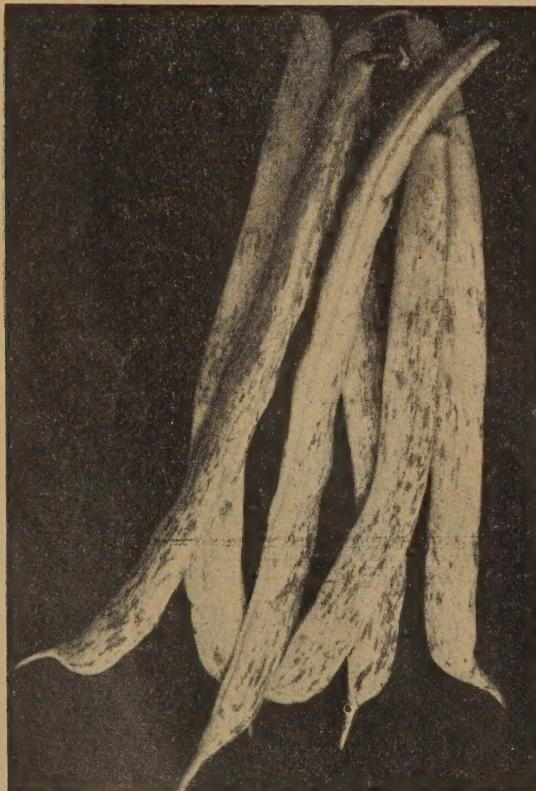
**PENCIL POD BLACK WAX.** Very desirable for home and market garden and for truckers. Plant large and thrifty. Heavily productive over long period. Pods handsome bright yellow, 5½ to 6 inches long, ¾ inch thick, cylindrical; very fleshy, stringless, brittle, fine grained, and tender. Quality unexcelled. Seeds black.

**STRINGLESS WAX.** (Brittle Wax.) Valuable for home garden and canning. Plants are erect, medium large, prolific. Handsome pods of waxy light yellow, 5½ to 6 inches long, thick and round. Very fleshy, brittle, strictly stringless and without fibre. Seeds white with brownish-black eye.

## POLE OR RUNNING VARIETIES

Prices postpaid: Pkt. 15c; ½ lb. 25c; lb. 45c,  
unless otherwise noted.

**CULTURE.** One pound will plant 50 hills, 30 pounds per acre. The soil should be mellow, rich and warm. Lay the ground out in hills 4 feet apart each way, and set poles 8 to 10 feet long firmly in the hills before planting the seed. Plant 5 or 6 beans in a hill and cover about 2 inches deep; leave three plants at each pole, and when a few inches high draw a little earth around them as support. Set the poles before the plants have grown to large size; many gardeners consider it an advantage to set the poles when planting, thus avoiding disturbing the small plant or its roots.



BEAN, OREGON GIANT

**OREGON GIANT.** A very desirable snap bean. A good climber and very prolific. Pods long, thick-flat, stringless when young, exceedingly tender, rather broad, meaty, pods splashed purplish blue. Pkt. 15c; ½ lb. 30c; lb. 50c.

**BLUE LAKE BEAN.** Matures in 62 days. A splendid snap bean for home garden and early market. Good climber, heavily productive. Pods light green, 5½ inches long, ½ inch wide, almost as thick; nearly stringless, very fleshy, brittle, tender. Seeds white; excellent for baking. Because of the near-stringless character of this variety it is preferred by many to Kentucky Wonder.

**KENTUCKY WONDER (Old Homestead).** Matures in 65 days.

Unexcelled for home garden and for market. Excellent climber, thrifty, heavily productive. Pods medium green; 9 to 10 inches long, nearly round and ½ inch in diameter; slightly stringy, very fleshy, brittle, tender. Prices at top of page.

**SCARLET RUNNER.** Matures about same as Limas. Good climber. Flowers scarlet, decorative. Pods dark green; 6 inches long, flat oval; fleshy; desirable for snaps and green shell beans. Very attractive as porch or arbor cover. Pkt. 15c; ½ lb. 35c; lb. 60c.

**KENTUCKY WONDER WAX.** An early and hardy bean somewhat resembling the Kentucky Wonder except in color of pods, which are light yellow and broader. If a wax podder bean is desired for home or market this is the one best variety to plant. Seed oval, flattened, somewhat shriveled, dark brown.

## LIMA BEANS

Prices postpaid: Pkt. 15c; ½ lb. 25c; lb. 45c,

**HENDERSON'S.** Sometimes called the Baby Lima, and known in some sections as the Butter Bean. Plant is small, dark green, erect, bushy, and very early. Pods flat, green shelled beans flat, small and of excellent quality. Pkt. 10c; 1 lb. 50c.

**BURPEE'S BUSH LIMA.** Mature in 75 days. Plant large, heavily productive. Pods large, 4½ to 5 inches long, 1¼ inches wide, ¾ inch thick; usually contain 4 large, thick beans. Dry beans large, flat, greenish-white. Prices at top of this page.

**OREGON POLE LIMA.** Proven over many years to be well adapted to our cool Northwest climate. A strong, vigorous grower, bearing continuously until frost. Pods are at their best when turning yellow.

## BEET

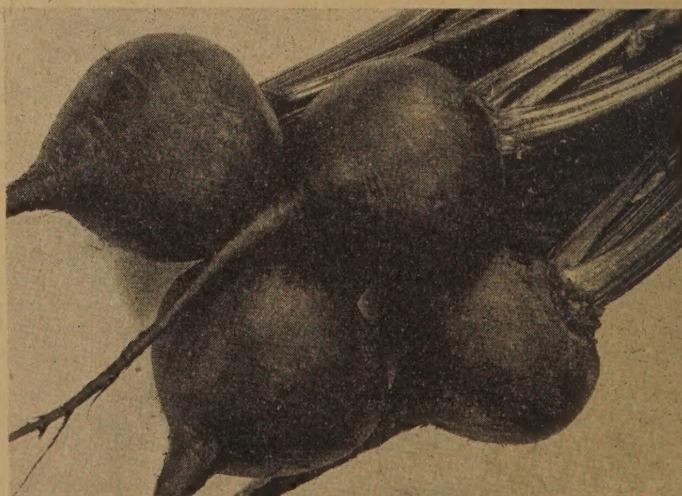
1 oz. to 100 ft., 8 to 14 lbs. per acre

Seed should be sown at the rate of one ounce to 100 feet of row. The rows should be spaced 14 to 24 inches apart. Work the soil well and cover the seeds about an inch deep. A rich sandy loam is most favorable, but nearly all types of soil will produce beets if sufficiently fertilized and properly tilled. All varieties of beets sell for: Pkt. 10c; 1 oz. 25c; ¼ lb. 50c; 1 lb. \$1.50.

**DETROIT DARK RED.** The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, slender, erect. Roots globe shaped; symmetrical, with small collar and small tap-root. Very dark blood red.

**EARLY WONDER.** Very desirable for home and market garden. Tops small. Root flattened globe shape with small collar and tap-root. Dark purplish red. Flesh deep purplish red zoned a lighter shade.

**EARLY EGYPTIAN.** Best for forcing and particularly valuable for early market. Tops small and upright. Roots flattened, with long slender tap-roots. Flesh dark purplish red zoned lighter.



BEETS, DETROIT RED

## MANGEL WURZEL

1 oz. to 100 ft., 6 to 10 lbs. per acre

Valuable as stock feed. Plant early in the spring in rows 2 1/2 feet apart. The seeds should be 1 inch apart in the row and covered by 1 1/2 inches of soil firmly pressed down. Cultivate frequently. When the plants are 3 inches high, begin to thin until the roots are 10 inches apart. All varieties of Mangels: 1 oz. 20c; 1/4 lb. 50c; 1 lb. \$1.50.

**DANISH SLUDSTRUP.** Very high yielder. Roots long oval, orange colored; flesh white with faint yellow tinge.

**GIANT HALF SUGAR.** This variety is one of the favorites among the dairymen and hog raisers. It is very sweet and nutritious, as it has a larger sugar content than the ordinary mangel.

**GOLDEN TANKARD.** Heavy cropper; easily harvested. Roots large; thick oval, nearly cylindrical; light gray above, deep orange below ground. Flesh yellow with white zones.

**MAMMOTH LONG RED.** Superior to strains offered or Norbiton Giant, Colossal, Monarch, etc. Roots very large; long spindle shape, straight and thick; grow one-third to one-half out of ground. Light red; flesh white tinged with rose.

**SUGAR BEET.** The most desirable beet for sugar manufacture. Valuable for stock feeding. Roots medium large, 12 to 15 inches long, 3 1/2 to 4 inches at shoulder, tapered; white, with a tinge of gray; very rich in sugar content. Good keeper.

## BROCCOLI

1/2 oz. to 100 ft., 4 oz. per acre

This is similar to cauliflower in color, character of foliage, form, and size of heads. It requires a long growing season and is especially suited to the Pacific Coast states. Pkt. 10c; 1 oz. 70c.

**ITALIAN GREEN SPROUTING.** This vigorous plant is entirely different from the white heading sorts. Cultivated like cabbage, it bears a succession of sprouting heads which, if kept cut, will be replaced by others for 8 to 10 weeks. Each sprout, about 5 inches long, ends in a small head of deep green buds. It is one of the most delicious green vegetables.



BROCCOLI

## BRUSSELS SPROUTS

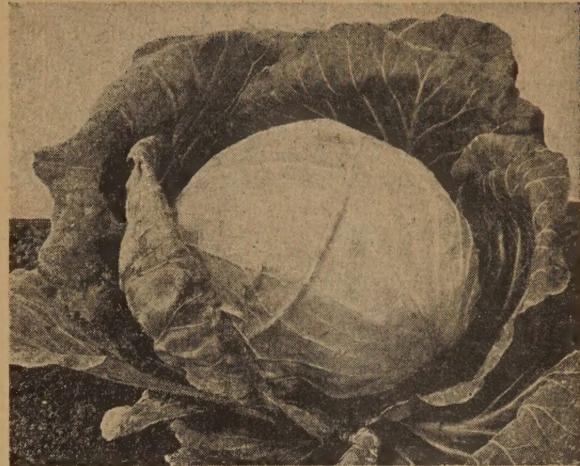
1/2 oz. to 100 ft., 4 oz. per acre

Small shoots like miniature cabbages clustered around a stem are the valuable part of this unique member of the cabbage family. They are successfully grown wherever conditions are favorable for late cabbage and require the same method of culture. They mature best in the autumn after the weather becomes cool. Pkt. 10c; 1 oz. 75c.

**DWARF IMPROVED.** Plants dwarf and compact. 20 inches tall. Very uniform; stem well covered with firm, round cabbage-like balls of 1 1/4 to 1 1/2 inches in diameter which mature in succession.

**SEMESAN.** Protects seed and plants from disease and decay. Produces better stands and larger yield from all seeds. Successfully used in combatting damping off of seedlings in flats, pots or greenhouse.

1/3 oz. 12c; 2 oz. 45c; 12 oz. \$2.10



CABBAGE, COPENHAGEN MARKET

## CABBAGE

1/2 oz. to 100 ft., 4 oz. per acre

For plants of early kinds, sow seed in January under glass and put out into flat about 2 inches apart. Transplant to open ground as early in the spring as the soil can be prepared, setting 1 1/2 to 2 feet apart, in rows, which should be 3 feet apart. Cultivate frequently, and during dry weather water copiously. Late cabbage seed should be sown in drills in open ground during April and May, and transplanted in June or July. Fertilize heavily, using 400 pounds nitrate of soda per acre in three dressings, one-third when plants are set out, and two-thirds a month apart later. Pkt. 10c.

### EARLY VARIETIES

**COPENHAGEN MARKET.** Distinctly and uniformly early. Splendid for early market and shipment; proving valuable as early kraut variety. Plants small, compact, allowing very close planting. Stem short; heads uniformly round; firm, becomes 6 to 7 inches in diameter. Weight 3 1/2 to 4 pounds. Interior clear white and of excellent quality. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c; 1/4 lb. \$2.25.

**EARLY JERSEY WAKEFIELD.** Extremely early variety, very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing close planting; stem short. Heads firm and conical; usually 7 inches long; 5 inches thick near base; weight, 2 to 2 1/4 lbs. 1/2 oz. 30c; 1 oz. 50c.

**GOLDEN ACRE.** The earliest round headed cabbage, especially valuable for early market and shipping. Plants very small and compact; stem short. Heads uniformly round; firm, commonly 6 inches in diameter and weight 3 pounds. Pkt. 10c; 1/2 oz. 40c; oz. 75c; 1/4 lb. \$2.25.

### LATE VARIETIES

**DANISH BALL HEAD.** Without exception, this is the best late cabbage. The plants are medium sized with short stem. Heads large; flattened globe shape; become 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid; of excellent quality; keep perfectly in storage until late spring. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c.

**LATE FLAT DUTCH.** The best very large, late cabbage. Popular for home and market garden. A good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep, and weigh 12 to 14 pounds or more; firm, and of good quality. Pkt. 10c; 1 oz. 50c.

**MAMMOTH RED ROCK.** A sure cropper and used very extensively for pickling. The solid heads are borne on medium-length stems and are red throughout. Perfectly round, solid as a rock, and quite large, often weighing 6 to 8 pounds each. The latest of the red cabbages. Pkt. 10c; 1 oz. 75c.

**SAVOY.** Enjoys great popularity on account of its tasty flavor, which is sweeter and more delicate than that of ordinary cabbage. The large round heads are somewhat flattened and very heavy. The deep green, crinkled outer leaves enclose the tender, light green heart. It matures late in the fall and will keep all winter. Pkt. 10c; 1 oz. 75c.

**CHINESE IMPROVED OR WONG BOK.** This exceptionally fine vegetable is rapidly growing in public favor. Its growth, which resembles the Cos lettuce, has long heads and crisp leaves. Very mild and pleasant flavor served as a salad or cooked. Pkt. 10c; 1 oz. 50c.

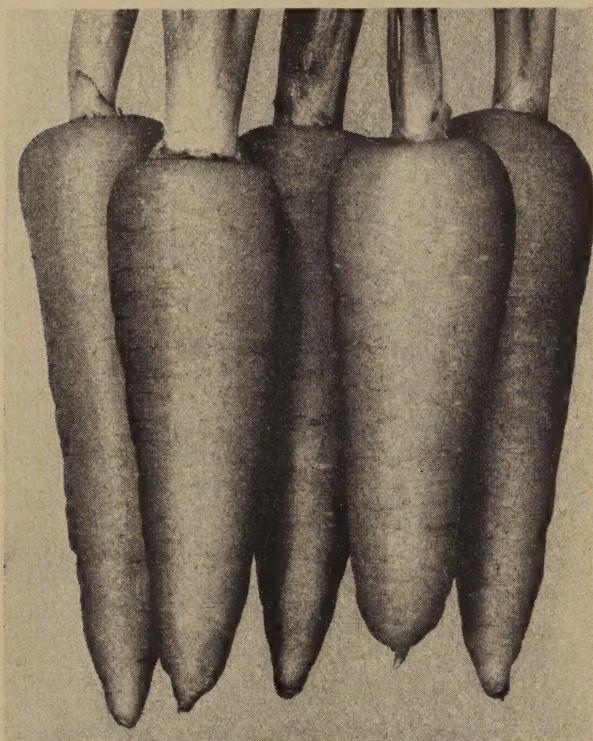
## CARROTS

1/2 oz. to 100 ft., 3 to 4 lbs. per acre

Sow seeds in light sandy soil, from April to July, in drills  $1\frac{1}{2}$  feet apart, covering the seed  $\frac{1}{2}$  inch deep. Thin out the young plants from 3 to 5 inches apart, according to size of variety. Cultivate freely and do not allow the soil to get too dry during hot weather. All varieties of carrots: Pkt. 10c; 1 oz. 35c;  $\frac{1}{4}$  lb. \$1.00.

**CHANTENAY, NEW CORELESS.** Flesh is a deep golden orange color, always smooth and fine in texture, very tender. Excellent bunching variety and grown extensively by market growers. Medium early.

**CHANTENAY, RED CORE.** A fine carrot. Flesh tender and sweet, reddish orange in color with the core indistinct and of about the same color as the surrounding flesh. Suitable for canning and table use. 72 days.



CARROT, CHANTENAY

**DANVER'S HALF LONG.** The roots are a rich dark orange color and by reason of its symmetrical shape, which is long and pointed, it makes an excellent bunching variety. It has proved over a period of years to be the most popular carrot, both with the grower and the shipper.

**NANTES CORELESS.** Excellent for forcing, as well as for home and market garden use. Tops very small. Roots bright orange, cylindrical, blunt tipped. Flesh reddish orange, crisp, tender and of very delicate flavor. Practically coreless.

**IMPERATOR.** This carrot grows to a length of 6 to 7 inches with a shoulder diameter of  $1\frac{1}{4}$  to  $1\frac{1}{2}$  inches and is a deep orange color. It has a smooth crown; does not have undesirable side shoots; has a fine texture, and is good and sweet. In all respects it is very attractive for shipping purposes.

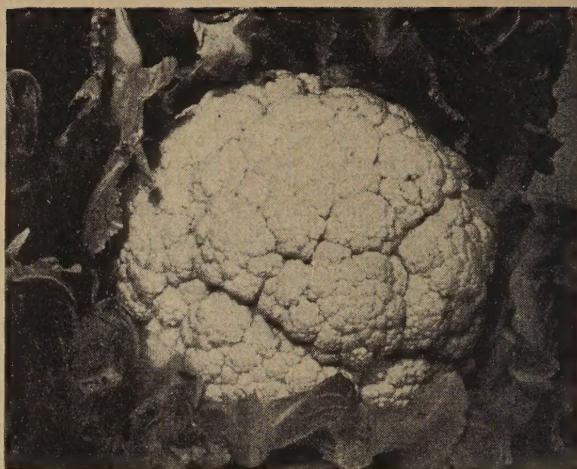
**OXHEART.** Beautiful shape and color. The roots generally attain 4 to 5 inches in length, and about 3 inches in diameter. Quality first rate, very tender, and a variety that is used in quantity.

**LONG ORANGE.** A heavy cropper on light soils; much grown for stock as well as for table use. Roots scarlet-orange; 10 to 12 inches long, 2 inches thick at the top; tapered, pointed.

## STOCK CARROTS

Pkt. 5c; 1 oz. 30c;  $\frac{1}{4}$  lb. 90c; 1 lb. \$2.00

**ORANGE BELGIAN.** A very productive variety, with roots measuring 20 inches long. They are broad at the shoulder, and gradually taper to a fine point. The skin below the ground is a light orange, but above the soil surface it is green. Will yield heavily, particularly on good deep soil.



CAULIFLOWER, EARLY SNOWBALL

## CAULIFLOWER

1/2 oz. to 100 ft., 4 oz. per acre

The same methods that produce good cabbage will grow good cauliflower. The only great difference is that cauliflower heads must be protected from sunlight so as to make sure of the desirable white curd. Gather the tops of the leaves together loosely as soon as the heads begin to form. In shutting out the light, it is important not to cramp the heads. Pkt. 15c.

**DANISH GIANT, DRY WEATHER.** One of the most dependable in adverse, dry weather. Plants dwarf, short stemmed; larger than Early Snowball. Heads large, 6 to 7 inches across, commonly weigh 2 pounds. White with tinge of cream; of splendid quality.

**EARLY SNOWBALL.** The best for greenhouse forcing, early market and shipping. Plants very dwarf. Heads snow white; deep, smooth, compact; about 6 inches across, weight  $1\frac{1}{2}$  to 2 pounds. The standard of excellence in cauliflower.

## SWISS CHARD

1 oz. to 100 ft., 6 to 10 lbs. per acre

Only the tops of this beet are used, like spinach, and the succulent stalks and midribs may be prepared in the same way as asparagus. The plants are cultivated like beets except that they should be thinned to 8 to 10 inches apart. Pkt. 10c; 1 oz. 25c;  $\frac{1}{4}$  lb. 70c.

**LUCULLUS, DARK GREEN.** The fleshy crumpled leaves of this variety make very choice greens. Plant erect; stalks rounded and finely ribbed. Foliage a rich deep green.

**RHUBARB CHARD.** Easily grown, thrives everywhere. Leaf stalks are bright but delicate, translucent crimson; the rich color extends out through the veins into the dark green leaves. Delicious flavor. Pkt. 10c; oz. 30c.



RHUBARB CHARD

## CELERY

1/4 oz. to 100 ft., 4 oz. per acre

Sow from February to May in drills 1 foot apart. Later, usually in June, transplant to rows 3 feet apart and 6 inches apart in row. Rows should be furrowed out so plants may be set 6 inches deep. Later, soil may be banked against rows for blanching, even so-called self-blanching varieties needing the cool, moist soil to render the stalks crisp and tender, but this should not be done until a few weeks before harvesting. One ounce of seed will produce 5000 plants. Pkt. 10c.

**GOLDEN UTAH CELERY.** A light yellow-green selection of the original "Utah." Has superb quality and size of original, plus easier bleaching quality and more attractive sales appearance. An outstanding celery that merits your confidence.

**GOLDEN YELLOW SELF-BLANCHING.** Early and particularly desirable for home and market garden. Plants fairly tall and compact with firm stalks, 26 to 28 inches tall, which blanch readily and are of splendid quality.

**UTAH JUMBO WINTER.** A remarkable late celery of the finest quality. Plants sturdy, compact and solid. Very free from strings. Light green in color; quality flavor.



CELERY, UTAH

## CELERIAC

1/4 oz. to 100 ft., 4 oz. per acre

Sow seed at the same season and give same treatment as common celery. Transplant to moist, rich soil, in rows 2 feet apart and 6 inches apart in row. Give thorough culture. It is not necessary to earth up or handle the plants. After the roots have attained a diameter of 2 inches, they are fit for use.

**LARGE SMOOTH PRAGUE.** An improved variety of turnip-rooted celery, producing large tubers of nearly globular shape and comparatively smooth surface. Pkt. 10c.

## CORN

Sweet corn, 8 oz. to 100 ft., 10 to 14 lbs. per acre

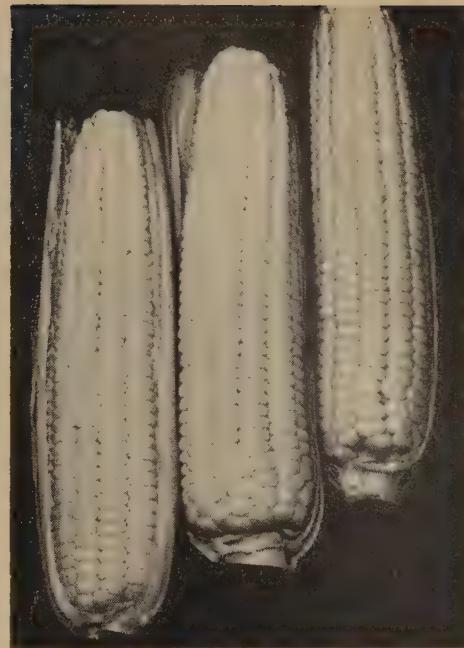
Popcorn, 6 oz. to 100 ft., 6 to 8 lbs. per acre

Plant in rich, warm soil, in hills 2 to 3 feet apart, in rows 3 feet apart for early kinds and 4 feet apart for late sorts. Make first sowing about the middle of May and continue fortnightly up to about the middle of July. Pkt. 10c; 1/2 lb. 20c; 1 lb. 35c.

## CORN, EARLY SORTS

**GOLDEN EARLY MARKET.** One of the best extra early yellow varieties for home and market garden. Ears have strong husks and 8 to 12 beautiful tender rows to each ear. Kernels golden yellow, medium, sweet and of good flavor. Very prolific.

**GOLDEN SUNSHINE.** A very fine early variety. Good sized ears with 10 to 12 rows of medium broad, golden yellow kernels. Sweet and tender. Particularly desirable for market garden use.



CORN, GOLDEN CROSS BANTAM

## INTERMEDIATE AND LATE SORTS

**GOLDEN BANTAM IMPROVED.** A selection from the original strain of Golden Bantam. Larger ears, more rows of kernels, greater production. Golden yellow, deep, wide, tender kernels with a fine, sweet flavor. Particularly desirable for canners and market gardeners. Remains in table condition a long time.

**GOLDEN CROSS BANTAM.** Very uniform in habit of growth, size, and maturity. The ears measure 8 inches long and they are closely set with 14 rows of light yellow grains filled with delicious sweet pulp. Bears two ears per plant. Pkt. 15c; 1/2 lb. 25c; 1 lb. 45c.

**GOLDEN GIANT.** This is the giant among the yellow varieties with ears measuring 8 inches long. Matures its handsome ears about a week after Golden Bantam. Each cob is tightly set with 12 or 14 rows of sugary, creamy, yellow kernels covered by a thin tender skin.

**MARCROSS.** Stalks short but sturdy, highly resistant to bacterial wilt. Ears long, plump, abruptly tapered at tips; 10-14 rowed, with light cream-yellow medium broad kernels of good quality. Pkt. 15c; 1/2 lb. 25c; 1 lb. 45c.

**STOWELL'S EVERGREEN.** One of the best late varieties. Large ears about 8 inches long. Kernels clear white, deep, rather broad, very sweet and tender. 16 to 20 rowed; uniform. Holds well in prime condition at eating stage. Stalk sturdy and erect. Highly desirable for home and market gardeners.

## FIELD CORN

8 to 10 lbs. per acre

Write for quantity prices

**MINNESOTA "13" YELLOW DENT.** An early maturing yellow dent corn that is a favorite in all the corn growing sections west of the Rockies. More of it is being grown than all other varieties combined. The stalks are of medium size, the ears 9 to 11 inches. 1 lb. 20c; 10 lbs. \$1.75.

**IDAHYBRID 416.** Grain type hybrid field corn. Develops few suckers, has a straight stiff stalk, ideal for mechanical pickers. Ears dry quickly and husk out easily. Exceptionally good yielder. Often used for ensilage as it will grow 10 to 11 feet high. 1 lb. 35c; 10 lbs. \$2.85.



FIELD CORN, IDAHYBRID 416



CUCUMBER, DAVIS PERFECT

EGGPLANT



KOHL RABI

## CUCUMBER

1 oz. to 100 ft., 3 to 4 lbs. per acre

Sow outdoor varieties early in spring, in hotbeds, and transplant to open ground when weather is suitable. For later crop, sow seed when weather becomes settled, in hills 4 to 6 feet apart. They require a warm, rich soil and should be watered liberally. Pkt. 10c; oz. 35c; 1/4 lb. \$1.00.

**DAVIS PERFECT.** (68 days.) A splendid dark green variety, excellent for slicing and a good shipper. Very dark green; white spined. The color is retained a long time when pickled. Tapered somewhat at both ends. Seeds few.

**IMPROVED LONG GREEN.** This is a great improvement over the old strain of Long Green. The fruits are unusually handsome, being of good form and of a deep green color, which is retained a considerable time after picking. 9 to 10 inches in length.

**STRAIGHT-8.** An outstanding new variety producing symmetrical, cylindrical fruits about 8 inches long and 1 1/2 inches in diameter. Fruits are well rounded at the ends and when ripe are deep green and free from objectionable striping or tipping. Ideal for home or market garden.

**BOSTON OR CHICAGO PICKLING.** An early pickling or slicing variety. Fruits weigh about 1 1/2 pounds, 6 inches long and 2 1/2 inches in diameter.

**LEMON.** The vines produce prolifically, dainty little cucumbers resembling lemons in both form and color and having a delicious and distinctive flavor. A popular variety for the home garden. Fine for preserves or sweet pickles and considered superb as a salad.

## EGGPLANT

1/4 oz. to 100 ft., 5 to 6 oz. per acre

Sow in mild heat, about the middle of March, and transplant on June 1, setting the plants 2 1/2 feet apart. Pkt. 10c; oz. 65c.

**BLACK BEAUTY.** The fruits of this variety are large and symmetrical. Retains its glossy black-purple coloring for a long time. This lasting quality makes it distinctly popular.

**IMPROVED LARGE PURPLE.** The standard home and market sort. Plants are large, 30 to 36 inches tall. Very productive, commonly bearing 4 to 6 or more large handsome, dark purple, symmetrical, broad, egg-shaped fruits.

## ENDIVE

1 oz. to 100 ft., 4 to 5 lbs. per acre

Sow about the middle of April, in rows 1 1/2 feet apart, and thin to about 9 inches apart. Pkt. 10c; oz. 30c.

**BROAD-LEAVED (ESCAROLLE).** Leaves long, broad, and succulent. Fine for winter salads and cooking.

**GREEN CURLED.** Standard variety for fall and winter crop.

## KALE, Borecole

1 oz. to 100 ft., 4 to 5 lbs. per acre

The culture is practically the same as that of late cabbage, but as the plants will withstand several degrees of frost they can grow late into the fall. Many think kale best after the first heavy frost. Pkt. 10c; oz. 20c; 1/4 lb. 60c.

**DWARF GREEN CURLED SCOTCH.** Plants have wide-spreading, finely furled blue-green plume-like leaves. Relished as a vegetable green and useful as an ornament.

**TALL GREEN CURLED SCOTCH.** Hardy plants with leaves deeply cut. Curled at the edges, light green in color; very tender and finely flavored after touched with frost.

**JERSEY OR THOUSAND HEADED.** Called Chicken or Cow Kale. Vigorous branching plants with enormous cabbage-like leaves. Relished by poultry and livestock as winter greens.

## LEEK

Pkt. 10c; 1 oz. 75c

**LARGE AMERICAN FLAG.** An early popular sort. Stems 8-10 inches long, 1 1/2 inches thick, white and attractive. Leaves large, medium green, drooping backward.

## KOHL RABI

1/2 oz. to 100 ft., 4 to 5 lbs. per acre

The delicious flavor of this turnip-shaped bulb combines both cabbage and turnip. As early in spring as possible, sow the seed in light rich soil in rows 1 1/2 feet apart. When plants are well established, thin to 6 inches apart in the row. Pkt. 10c; oz. 50c.

**EARLY PURPLE VIENNA.** Standard early sort. Plants small; leaves dark green and profuse purple staining. Bulbs flattened globe shape, best for use when 2 to 2 1/2 inches in diameter, but become larger; exterior purple; but flesh white; mild, crisp, and tender.

**EARLY WHITE VIENNA.** For forcing. The best table sort if used when the bulbs are 2 inches in diameter. It matures very early and produces medium sized, light green bulbs with white flesh of excellent quality.



ENDIVE

## LETTUCE

1/2 oz. to 100 ft., 3 lbs. per acre

Sow the seed in hotbeds during February until the middle of March, afterward transplanting into flats or coldframes, leaving about 6 to 8 inches between the plants. As soon as weather becomes suitable, transfer to open ground and set out in rows 1 foot apart, leaving 9 inches between the plants in the rows.

### HEAD LETTUCE

Pkt. 10c; 1 oz. 35c; 1/4 lb. \$1.00

**GREAT LAKES.** (83 days.) A heading variety of the Imperial type developed by U. S. Department of Agriculture and Michigan Experiment Station. Leaves large and well folded; ribs heavy. Shows considerable resistance to tipburn and ability to head under adverse conditions. Pkt. 15c; 1 oz. 50c.

**IMPROVED HANSON.** A very hardy lettuce, excellent for a summer crop as it withstands heat. Forms a large, light green head, which is very hard. An excellent variety for the home gardener for it is very sweet, crisp and tender.

**NEW YORK NO. 515 IMPROVED.** A development from Number 12, matures slightly earlier and should be grown where there is hot weather as it is resistant to tip-burn.

**NEW YORK NO. 12.** Small, extra early; crisp. Will withstand hot weather.

**SLOBOLT.** Light green with leaves well frilled at the edges. A good home garden variety that is particularly good in hot weather. 45 days. Pkt. 15c; 1 oz. 60c.

### LEAF LETTUCE

Pkt. 10c; 1 oz. 25c; 1/4 lb. 65c

**GRAND RAPIDS.** Very early. Hardy, disease resistant; the most widely used and best adapted variety for greenhouse forcing. Plants large, upright, compact, and handsome; bright solid light green; leaves large, broad; margin much frilled; very tender and sweet when grown under glass.

**OAK LEAF.** Shaped like an oak leaf, deep green color. Stands up well in hot weather and does not turn bitter.

**RED LEAF PRIZE.** An early non-heading sort, very desirable for home garden use. Plants of medium size, crisp and tender; color medium green with brownish-red edges on outer leaves.

**SIMPSON'S EARLY CURLED.** Widely used for home gardens. Early, hardy and dependable; non-heading with large crumpled, frilled leaves, forming a compact bunch at center of plant. Light green in color. Tender and sweet.

**CHICKEN LETTUCE.** This is a non-heading lettuce, quite different from those used for human food. The plants grow 4 ft. tall before they run to seed. It is ready for cutting in 45 days after sowing. Planted extensively for feeding poultry and rabbits.



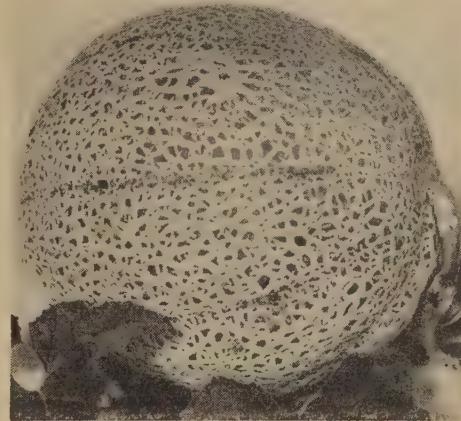
LETTUCE, GREAT LAKES

## MUSKMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre

In sections where the summers are short, seed can be planted indoors or in hot beds in small boxes. The young plants can be transferred to the garden when danger of frost is past. If practicable, spade in a liberal forkful of well rotted manure at the bottom of each hill. The rows should be at least 6 feet apart and the hills 3 feet apart in the rows. In general, the culture is the same as that for cucumber. Pkt. 10c; 1 oz. 25c; 1 lb. \$2.00.

**HEARTS OF GOLD.** This popular medium sized melon follows the earlier varieties. It is fine to plant for succession as it ripens in about 100 days. The fruits are 5 to 6 inches in diameter. The smooth orange salmon flesh is exceptionally thick and fine flavored.



MUSKMELON, HALES BEST

**HALE'S BEST No. 45.** The No. 45 is a true Hale's Best, mildew resistant. An early variety. Oval shape, medium sized melon with heavy net and a faint stripe. Flesh is deep salmon, thick, and firm with small seed cavity.

**CASABA.** The casaba is rapidly taking its place as a melon for the late season after the muskmelons are past. Fruits are medium, large, globe shaped, weigh 6 pounds, outer color golden yellow, surface wrinkled. Flesh white, luscious and spicy.

**HONEY DEW.** A very fine melon. Fruits large, globular, weigh 5 to 7 pounds. Surface is smooth, hard, with practically no netting, creamy white. Flesh is light emerald green, thick ripening to the rind; juicy and tender, with a distinct sweetness not found in other melons.



LETTUCE, OAK LEAF

## WATERMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre

Rich, rather sandy soils produce the finest crops of watermelons, but a well-drained loam, especially with a southern exposure, is also suitable. Place 6 to 8 seeds in a circle in each hill, and cover  $\frac{1}{2}$  inch deep with fine soil. One ounce will plant 20 to 25 hills; 3 to 4 pounds per acre. Pkt. 10c; oz. 20c.

**BLACK-SEEDED ICE CREAM.** The melon is almost round, with a thin rind of medium green. The inside flesh is pink and exceptionally sweet and fine flavored. This variety matures early and is a fine keeper.

**KLECKLEY SWEET.** A medium size melon, rind very green and flesh deep red. Delicious flavor. An excellent melon for either home garden or shipping. Weighs about 30 pounds.

**KLONDIKE BLACK SEEDED.** An early sort, a good shipper and popular in Western home gardens. Fruits oblong, slightly tapered, medium sized with slight ribs; rind medium hard. Flesh bright deep red, very sweet; unequaled eating quality.



STRIPED KLONDIKE

**STRIPED KLONDIKE.** An early garden and shipping variety similar to the regular Klondike but with irregular dark green stripes. Fruits oblong, of medium size. Flesh the deepest red known to watermelons; sweet and crisp, seed small. Pkt. 10c; 1 oz. 30c.

## MUSTARD

1/2 oz. to 100 ft., 4 lbs. per acre

Seed may be sown from early spring to midsummer in rows 18 inches apart. Thin to 5 or 6 inches apart in the rows. The plants are in condition for use as soon as the leaves are the size of one's hand. Mustard runs to seed quickly, so that successive plantings are necessary for a continuous supply. Pkt. 10c; 1 oz. 20c.

### SOUTHERN GIANT CURLED.

The leaves are large, light green with a tinge of yellow, and much crumpled and frilled at the edges. The plant is upright or slightly spreading in growth. This variety is valued in the South on account of its vigorous growth, hardiness, and good quality.



## OKRA or GUMBO

2 oz. to 100 ft., 8 to 10 lbs. per acre

Sow seed early in May, in rows 3 feet apart and 2 inches deep. As plants appear, thin out to about 1 foot apart. Pkt. 10c; oz. 20c.

**PERKIN'S MAMMOTH LONG POD.** Standard medium early sort for home, market garden and canning. Plants 4 to 5 feet tall; pods dark green, fleshy, tender; become 7 to 8 inches long,  $1\frac{1}{8}$  inches in diameter. Distinctly ribbed and tapered.



ONION, UTAH SWEET SPANISH

## ONIONS

1/2 oz. to 100 ft., 3 to 4 lbs. per acre

As early as soil can be worked in spring, sow the seeds thinly in drills 1 foot apart, and cover lightly, later thinning out to about 6 inches apart in the row. The soil must be well fertilized and be made very friable. In hot weather, water frequently. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c.

**CRYSTAL WAX BERMUDA.** Medium size, pure, waxy white. One of the mildest sorts grown.

**WHITE PORTUGAL, OR SILVERSKIN.** A good second early white flat onion. It should be planted any time from November 1st until April 1st. It is good keeper and desired for shipping. Also very desirable for green bunching onions. Under good cultivation the average diameter is from 4 to 6 inches.

**UTAH SWEET SPANISH.** A large, globe shaped brown onion, weighing 1 to 3 pounds. Small tops. Flesh mild and sweet. Good for slicing. Most popular market onion. Blue Tag Cert.

**YELLOW GLOBE DANVERS.** An outstanding variety, dependable cropper, medium late, hardy, and excellent keeper; used for shipping and storage. Bulbs medium size, spherical, clear yellow, firm and solid and tough, clinging skin. Flesh white with slight yellow tone.

**ONION SETS.** Sets are Northern grown, hardy, carefully cleaned, sized and packed. Produced for Western conditions. Plant onion sets deep for green onions and shallow for dry onions. 35c lb. Postpaid.

1 qt. to 100 ft., 12 bushels per acre

## ONION PLANTS

We can supply Crystal Wax or Sweet Spanish Onion plants after March 15th. Will make either young green onions or can be left to mature for dry onions. Prices postpaid. 1 bundle of 100 plants (count is approximate) 25c, 5 bundles \$1.15, 10 bundles \$3.50.

## PARSNIP

1 oz. to 100 ft., 3 to 4 lbs. per acre

Sow the seed as soon as season will permit, in drills about 2 feet apart, and thin plants out to 1 foot apart in the row. The ground should be deeply trenched and well manured. Pkt. 10c; oz. 20c; 1 lb. \$1.50.

**HOLLOW CROWN, THICK SHOULDER.** This is the best and most popular variety in cultivation. The skin is smooth and white, while the flesh is tender. The roots grow 18 to 20 inches in length, but the first 8 inches from the top is the best part.

**HARRIS MODEL.** Very smooth and white and quite free from small roots and prongs. Medium length. Fine for home gardens.



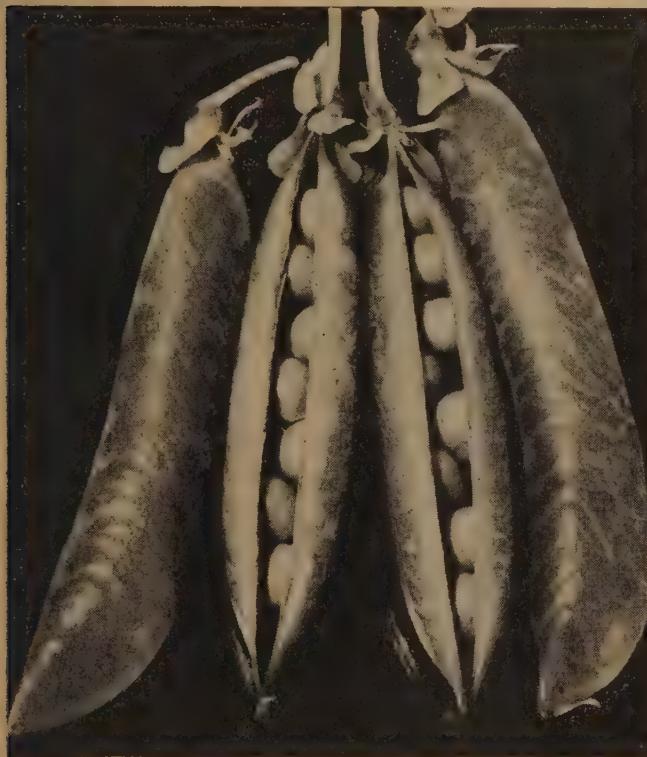
PARSNIP, HARRIS MODEL

## PARSLEY

1/2 oz. to 100 ft., 3 to 4 lbs. per acre

Parsley seed is even slower than parsnip in germinating. It grows best in rich mellow soil and should be sown as early as possible in spring in rows 1 to 2 feet apart with a covering of not more than 1/2 inch of soil firmly pressed down. When the plants are well up, thin them 8 to 18 inches apart in the row. Pkt. 10c; oz. 20c.

**EXTRA TRIPLE CURLED (MOSS CURLED).** This vigorous, compact grower is one of the most popular varieties because of its deep green color and tightly curled leaves that look like moss. It is unusually decorative for table use.



PEAS, GRADUS or PROSPERITY

## PEAS

1 1/2 lbs. to 100 ft., 90 to 180 lbs. per acre

For first crop, round seeded peas should be sown in the open ground as soon as it is fit to be worked; wrinkled varieties should be planted 2 to 3 weeks later. Frequent planting for succession, and a careful selection of varieties, will give an almost continuous crop of peas from June until frost. Sow peas in rows 3 feet apart and 1 to 2 inches deep. Rotted horse manure and wood ashes should be freely used in the preparation of soil for pea growing. Pkt. 10c; 1/2 lb. 20c; 1 lb. 35c.

### FIRST EARLY VARIETIES

**AMERICAN WONDER or NOTT'S EXCELSIOR.** Important early dwarf variety for the home garden. Vines 12 to 14 inches tall, dark green, very productive. Pods medium green, 3 inches long, plump and straight, blunt; seeds medium small, squarish, wrinkled, green; interior green.

**ALASKA.** This variety is extremely early. The round pods, 2 1/2 inches long, contain 5 to 8 peas, which are ready to use in about 55 days. The peas are small, round and tender. The vines are 2 1/2 to 3 feet tall.

**GRADUS OR PROSPERITY.** A very popular second early, large podded variety for home use and market. Vines 36 inches tall, medium green, stocky. Pods single, broad, plump, pointed, medium green; contain 8 to 10 large, sweet, delicious peas.

**LAXTON'S PROGRESS OR BLUE BANTAM.** A little earlier than other dwarf large podded peas, this variety is generally considered the best of its class. The blue-green pods are often more than 4 inches long and contain 8 dark green peas of finest quality. The seeds are large, wrinkled, green and cream in color.

**LITTLE MARVEL.** Outstanding among dwarf peas on account of its exceptional quality and yield. Valuable for home garden and early market. Vines dark green, 18 inches tall, stocky. Pods single and double, dark green, blunt, plump, well filled with 7 to 8 tender peas.

### LATE VARIETIES

**TALL TELEPHONE OR ALDERMAN.** A handsome, large podded variety. Unexcelled for home gardens, for local markets and for shipping. Bears immense crops; wilt resistant. Pods single, very broad, plump, straight dark green, pointed, contain 8 to 10 peas of highest quality.

**DWARF TELEPHONE.** Only about 2 feet tall. Resembles Telephone, and the pods are well filled with peas of the same good quality. It is an excellent variety to follow the early peas in the home garden. Seeds large, wrinkled, green.

## PEPPERS

**BULL NOSE.** Matures in 70 days. Rich deep green, turning to scarlet. Medium thick sweet flesh. About 3 inches long and 2 1/2 inches around. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c.

**CALIFORNIA SWEET WONDER.** Matures in 72 days; large green fruits available practically as early as Ruby King. This is the standard of excellence in sweet peppers; much used, particularly by market gardeners and shippers. Plant thrifty, upright, heavily productive over a long season. Fruit handsome, very large, very smooth and regular, commonly 4 1/2 ins. long and 3 1/2 to 4 ins. through; deep green, becoming bright crimson; flesh extremely thick and firm, sweet throughout and of distinct flavor. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c.

**LONG RED CAYENNE.** Matures in 70 days. A leading sort for use in pickling and for drying. Very pungent, fruits 5 inches long, 1/2 inch thick, tapered. Pkt. 10c; 1/2 oz. 40c; oz. 75c.

**RUBY KING.** Matures in 70 days. A prolific bearer with long, pendant fruits. The flesh is of medium thickness, mild and sweet. Fine for salads or stuffing. Pkt. 10c; 1/2 oz. 40c; 1 oz. 75c.



PEPPER, CALIFORNIA SWEET WONDER

## PUMPKINS

**CULTURE.** Enormous pumpkins may be grown on the fertile soils of Southern Oregon and Northern California. Plant the seed in the open ground when it is well warmed and after danger from frost is past. Plant in hills about 8 feet apart; 3 to 4 pounds of seed will plant an acre and 8 ounces will plant 100 hills. Do not plant near squashes, as they are likely to mix.

**CONNECTICUT FIELD.** The standard field pumpkin, grown for pies, canning and stock feed. Fruits very large, commonly 10 inches long, 12 inches in diameter and weigh 20 lbs., sometimes much larger; skin smooth, deep orange-yellow; shell thin, hard; flesh thick, coarse, sweet and deep yellow. Pkt. 10c; oz. 35c; 1/4 lb. \$1.05. Postpaid.

**NEW ENGLAND OR SWEET SUGAR.** A handsome and productive small pumpkin; skin orange, flesh yellow, fine grained, very sweet. This is the famous New England Pie Pumpkin. Pkt. 10c oz. 35c; 1/4 lb. \$1.05. Postpaid.



RADISH, SCARLET GLOBE

## RADISH

1 oz. to 100 ft., 10 to 12 lbs. per acre

For an early crop, sow in hotbed in January, February and March. As soon as ground is fit to be worked, sow seed in the open, in rows 1 foot apart. Pkt. 10c; oz. 20c.

**EARLY SCARLET GLOBE.** The earliest of all forcing radishes grown for market. Globular, uniform size, bright scarlet, white flesh, crisp and tender.

**EARLY SCARLET TURNIP—WHITE TIP.** This variety grows very quickly and is ready for picking in 25 to 30 days. Scarlet in color, turnip shaped, very crisp and of excellent flavor. One of the best varieties for the home gardener.

**CRIMSON GIANT.** A favorite with home gardeners. Large globular root, 1 to 1 1/2 inches in diameter, deep crimson, flesh firm.

**FRENCH BREAKFAST.** A splendid variety for home use; oblong, bright scarlet, white tip. Grows about 1 1/2 inches long and 5/8 inch thick.

**LONG WHITE ICICLE.** Long slender roots which remain tender and crisp until grown. Matures early; has small top, which permits close planting.

## WINTER VARIETIES

**BLACK SPANISH LONG OR ROUND.** A hardy, large rather pungent variety for winter use. Keeps unusually well; is 8 to 9 inches long and 2 inches thick, slightly tapered. The skin is black and flesh white and crisp. Round, about 4 inches in diameter.

**CHINA ROSE WINTER.** A large rose colored variety from the Orient. Hardy and rather mild. The flesh is white, and very crisp. This variety is broadcast at its base and is 4 to 5 inches long.

## RUTABAGA, Swedish Turnip

1 oz. to 100 ft., 2 to 4 lbs. per acre

The culture is the same as for common turnip, but if anything, less exacting in care. Pkt. 10c; oz. 20c; 1/4 lb. 35c; 1 lb. \$1.00.

**IMPROVED AMERICAN PURPLE TOP.** The old, popular standard sort both for stock feeding and table use. Flesh yellow, solid and sweet. Is globe shaped, of large size, of fine quality.

## SALSIFY, Vegetable Oyster

1 1/2 oz. to 100 ft., 7 to 8 lbs. per acre

The roots have a flavor like oysters. Succeeds best in a light, well enriched soil. Avoid coarse and fresh manure, as it will cause irregular and branched roots. Sow early and quite deep, giving the culture recommended for parsnip.

**MAMMOTH SANDWICH ISLAND.** Large and strong growing with long, smooth, white, tapering roots less likely to branch than those of other sorts. Pkt. 10c; 1 oz. 50c.



SPINACH, KING OF DENMARK

## SPINACH

1 1/2 oz. to 100 ft., 10 to 20 lbs. per acre

Sow in rows 16 to 20 inches apart and thin to 6 inches apart in the row when leaves are an inch wide. In the North, seed can be planted as soon as the ground can be prepared. In the South spinach will winter over with little or no protection. Pkt. 10c; oz. 20c; 1/4 lb. 30c; 1 lb. 80c.

**IMPROVED THICK LEAF.** The seed of this thick leafed variety produces the largest spinach. The leaves grow rapidly and remain in good condition a long time. The medium green leaves are large, rounded, slightly crumpled, succulent, and tender. It is an excellent home garden spinach.

**KING OF DENMARK.** One of the longest standing varieties and valuable for home and market use. Dark green leaves are smooth, oval in shape and have rounded points.

**NEW ZEALAND.** Although not a true spinach, the leaves look like spinach and are very useful as greens. On soils too poor to grow spinach successfully, the plants thrive and produce groups of small fleshy leaves that are tender and delicious when cooked. Each branch of the plant produces others, so that it goes on providing a continuous supply of greens throughout the summer. Pkt. 10c; oz. 25c; 1/4 lb. 75c.

## SQUASH

Vining, 1 oz. to 100 ft., 4 lbs. per acre

Bush, 1 oz. to 100 ft., 4 to 6 lbs. per acre

Sow about the middle of May, in hills 4 feet apart for bush varieties, and 10 feet apart for the running sorts. Put 12 to 15 seeds in each hill; afterward thin out, leaving 3 or 4 of the best plants. Pkt. 10c; oz. 20c; 1/4 lb. 60c.

**BANANA.** Smooth gray-light orange, fine-grained flesh, firm and solid and free from stringiness or fiber.

**EARLY SUMMER CROOKNECK.** Very early, 60 to 65 days. The bushy plant is very productive of attractive fruits, weighing about 2 pounds. The skin is distinctly warty and bears a bright yellow color, while the flesh is pale cream, firm and tender. A very good sort for home planting.

**GOLDEN DELICIOUS.** Most desirable squash, top-shaped and medium sized, with orange skin and thick, fine grained sweet and dry flesh. Fruits weigh about 7 lbs.

**GOLDEN HUBBARD.** A very good variety of medium size; weight about 8 pounds. An excellent keeper on account of its thick rind, which is of a beautiful golden color.

**IMPROVED HUBBARD.** Large and warty Hubbard type. Shell dark green, hard, moderately warty. Flesh light orange, very dry and richly flavored. One of the best winter squashes.

**UMATILLA MARBLEHEAD.** Thick meated squash. Large, slate colored variety. Yields heavy.

**TABLE QUEEN OR DANISH.** Small, dark green, acorn shape. Flesh rich yellow, dry, richly flavored. Medium early. A good keeper. Easy to grow.

**WHITE BUSH SCALLOP.** A popular variety bearing profusely small, rather flat white squashes with a distinct scalloped edge. Is very early and has a fine flavor.

**ZUCCHINI OR ITALIAN.** The favorite Italian squash. It should be eaten when quite young, 4 to 6 inches long. It is a delicious summer variety; do not hesitate to plant it. It is very prolific; a few hills will suffice to keep the family well supplied the entire summer.

**BLACK ZUCCHINI.** Considered by many to be a better variety than the older type. Similar in all respects but dark green, smooth and cylindrical, without striping or mottling.



ZUCCHINI SQUASH, BLACK

## TOMATO

1/8 oz. to 100 ft., 2 oz. per acre

In February or March sow seeds lightly in rows in greenhouse, hotbed, or window box, and when plants have reached a height of 3 inches, transplant in hotbeds. About June 1, set out in open ground, 4 feet apart, giving plenty of well rotted manure to each plant. Water freely during hot weather. To obtain the best results, trellises or stakes should be used. Pkt. 10c; 1 oz. 75c.

**BONNY BEST.** One of the very best early varieties for table and canning. Vine medium, not very hardy. Fruits medium sized, apple shaped, smooth, solid, bright scarlet in color, of excellent quality.

**IMPROVED EARLIANA.** One of the earliest scarlet fruited varieties. Medium size, almost seedless and solid. Vine open and spreading. A heavy bearer. Succeeds everywhere.

**MARGLOBE.** The best general purpose tomato recently introduced. Excellent home garden variety and particularly valuable for shipping. Plants thrifty and heavily productive and of long bearing period. Fruits uniform open scarlet; large; uniformly globe shaped; smooth, solid, and of distinct quality.



TOMATO, MARGLOBE

**STOKESDALE.** (73 days.) Produces heavy crops. Almost free of stem-end crack. Slightly earlier and larger than Marglobe. Cert.

**PRITCHARD (SCARLET TOPPER).** Wilt resistant, of the type of plant known as self-topping or self-pruning. Mid-season to late and a heavy topper. Fruit globe shaped, deep scarlet, smooth and solid. A good home and market variety and very popular for shipping. 70 days.

**WASATCH BEAUTY.** A compact, heavy bearing plant. The fruit is round, firm and smooth of a fine red color and borne in clusters of three to six good sized tomatoes. Especially good shipping and canning variety.

**GROUND CHERRY OR HUSK TOMATO.** Fruits small, yellow, enclosed in loose paper husks. Very much prized for preserving. Pkt. 10c; 1 oz. \$1.00.

**YELLOW PEAR.** Enormously productive. Fine for salads or marmalade. Sweet and delicious. Small, yellow, pear-shaped fruits of exceedingly mild and pleasing flavor. Pkt. 10c; 1 oz. \$1.00.

## TURNIP

1 oz. to 100 ft., 2 to 3 lbs. per acre

For main crop, sow in open ground from May to July; for winter use, during July and August. Set out in rows 1 1/2 feet apart, allowing a space of 6 inches between the plants. Pkt. 10c; 1 oz. 20c; 1/4 lb. 35c; 1 lb. \$1.00.

**GOLDEN BALL or ORANGE JELLY.** A splendid variety for table use; of excellent flavor. Tops small, cut leaved. Roots globular, commonly 4 inches in diameter. Skin smooth, orange-yellow; flesh yellow, firm, fine grained and of good quality. Rapid grower. Plant during cooler months only. Table size in 60 days.

**PURPLE TOP STRAP LEAF.** A medium early, very productive variety. Tops medium small, upright, strap-leaved. Roots flat, purple red at the top, white below; flesh white, fine grained and tender.

**PURPLE TOP WHITE GLOBE.** This variety may be grown to quite a large size without developing signs of coarseness. It is of spherical shape with white skin, the upper one-third being colored reddish purple. Flesh pure white, firm, fine grained and of superior flavor. Good keeper. Fine for table use and stock feeding.

**SNOWBALL.** A desirable sort for home use and early markets. Tops small and erect. Roots medium sized, round, white throughout, crisp, sweet and tender.

**YELLOW ABERDEEN.** Excellent for winter use. Cut leaved, globular, quite smooth; color purple top, yellow below; flesh firm, tender, light yellow.

**COW HORN.** This variety is pure white; in shape like a carrot, growing nearly half out of the ground, and slightly crooked. It is delicate and well flavored. Used also as a green manuring crop.

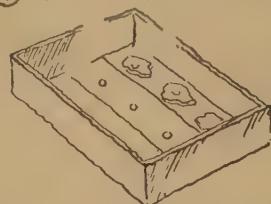


TURNIP, PURPLE TOP WHITE GLOBE

## HOW TO PLANT SEEDLINGS IN FLATS

All delicate plants such as Petunias, Stocks, Snapdragons, many vegetables like Tomatoes, Peppers, Cabbage, Celery, etc., and all perennials are best grown this way from seed. It saves time, and the resulting seedlings are huskier, ready to plant out sooner and often flower earlier than those from seed sown outdoors.

### ① DRAINAGE HOLES

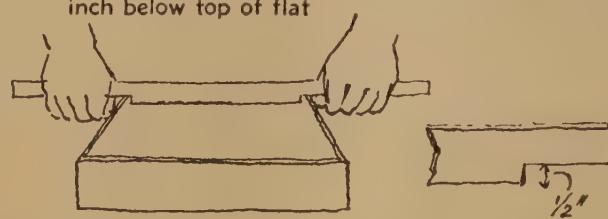


Place pieces of broken flower pots to keep drainage holes open.

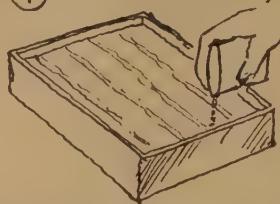
### ② FILL flat with soil made of equal parts of peat or leaf mold and garden loam and sand. With hand firm the soil around edges of flat



### ③ LEVEL soil by drawing notched lath back and forth across surface. Notches make soil level about $\frac{1}{2}$ inch below top of flat



### ④ SOW seed evenly either over the surface (broadcast) or in rows which can be marked with labels. Soak flat by standing in water until surface is wet



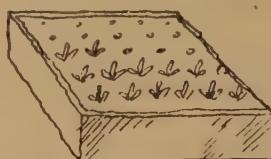
### ⑤ LOOSEN plants in flat with a putty knife or similar tool



### ⑥ LIFT little seedlings with a special tool made by notching the end of a garden label, as shown.



### ⑦ TRANSPLANT seedlings carefully in new flat of soil in hole made with a small dibble or pencil. Make holes 2 inches apart each way. Press soil firmly about the seedlings. Sprinkle with a fine spray of water



When seedlings are growing vigorously transplant to the open ground in beds previously prepared by spading, working in fertilizer and raking smooth.

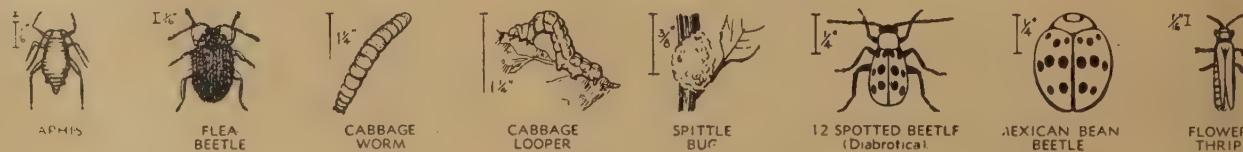
## To keep your garden healthy— know and fight its enemies:

### FUNGOUS PESTS OF THE FLOWER AND VEGETABLE GARDEN

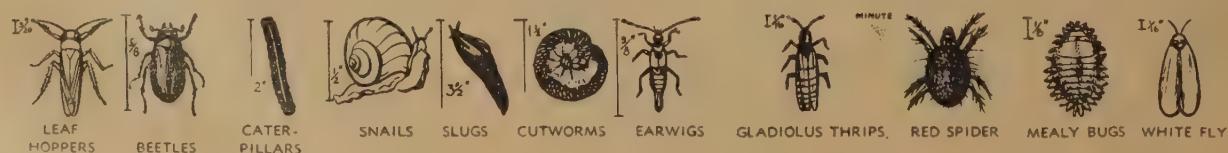


BLACK SPOT POWDERY MILDEW ON PEAS POWDERY MILDEW ON GRAPEVINES EARLY AND LATE BLIGHTS ON POTATOES EARLY AND LATE BLIGHTS ON TOMATOES RUST ON SNAPDRAGONS RUST ON HOLLYHOCKS PEACH LEAF CURL LEAF SPOTS

### INSECT PESTS OF THE FLOWER AND VEGETABLE GARDEN



### EITHER WE BRING THEM UNDER CONTROL OR THEY OWN THE GARDEN





ARCTOTIS HYBRIDS



SNAPDRAGONS

## Annual and Perennial Flower Seeds

### AGERATUM, Floss Flower (a)

One of the most popular Summer blooming plants grown from seed, being literally covered with flowers from early Summer until frost. Excellent for borders, edgings, rockery, or pots. The taller varieties are fine for cutting. Do well in semi-shade.

**AGERATUM MIDGET BLUE.** Silver Medal, All-America Selection, 1940. A very fine dwarf (2 to 3 inches high) Ageratum with delicate foliage, which is practically smothered with small true Ageratum Blue flowers. This is really the first dwarf Ageratum we have found that will come uniformly dwarf and true to color from seed. Pkt. 25c.

**BLUE BALL.** Compact round plants, 6 inches tall, hidden by a mass of pure blue flowers. Fine for dwarf beds and edging. Pkt. 15c.

### ALYSSUM, Madwort

One of the most popular garden flowers, remaining in bloom the entire season; suitable for beds and edging in Summer, or for growing in pots and boxes for Winter blooming.

**CARPET OF SNOW.** (ra). White flowers on plant only 3 inches tall. Rapidly becoming a favorite variety. Pkt. 10c

**SAXATILE COMPACTUM.** Perennial. Sometimes called Basket of Gold. It grows compactly and is covered with a wealth of golden blossoms in early spring. Height 12 inches. Pkt. 10c.

**VIOLET QUEEN.** Dwarf compact plants of small, sweetly scented flowers of a very rich deep shade of violet. Neat in habit and free flowering, Violet Queen will unquestionably be one of the leading novelties of the season. Pkt. 15c.

### ANCHUSA, Summer Forget-Me-Not (a)

A free-flowering class, producing its charming Forget-Me-Not-like blooms in graceful sprays from early Summer until late Fall.

**BLUE BIRD.** Deep blue flowers on plants 18 inches tall. Pkt. 10c.

### ARCTOTIS HYBRIDS AUTUMN SHADES (a)

A gay and cheerful member of the colorful winter and spring blooming flowers. Dozens of blossoms open at a time, commencing to bloom in December or January. Many shades of red, orange, yellow, typical autumn tones. Foliage is a soft gray green with slender wavy edged leaves. A decided addition to the border garden.

**Mixed.** Pkt. 10c.

### ANTIRRHINUM, Snapdragon (a)

Snapdragons are fascinating flowers, with their interesting form and glowing colors. They are easy to grow and will bloom continuously until severe frost, making a wonderful display and supplying unlimited cut flowers. Ordinary good garden soil will produce fine Snapdragons either in full sun or semi-shaded spots. Sow outdoors when danger of frost has passed, or indoors six weeks earlier.

**ROSALIE** (Bronze Medal, All-America Selections, 1940). This exciting color is entirely new in Antirrhinum. It is a rich deep rose with an underlying tone of topaz or amber, giving it a richness which makes it stand out among all other colors. The plants are base branching and produce from six to eight huge long flowering spikes on which the florets are decidedly well arranged. This is an all-purpose Snapdragon. Pkt. 25c.

**SWING TIME.** New rust resistant novelty. The loveliest rose pink imaginable with a bright yellow touch and a white tube that is an addition to its beauty rather than a hindrance. Spikes are huge and evenly packed with immense blooms beautifully tapered. Pkt. 15c.

### SUPER GIANTS, RUST RESISTANT

30 to 36 inches tall.

**APPLE BLOSSOM.** Rosy pink, white tube. Pkt. 15c.

**CRIMSON.** Fiery crimson. Pkt. 15c.

**FINEST MIXED.** Pkt. 15c.

### LARGE FLOWERED, HALF DWARF

Rust Resistant

**Finest Mixed.** Pkt. 15c.



ALYSSUM, VIOLET QUEEN

## AQUILEGIA, Columbine (p)

These are among the most beautiful of Spring and early Summer flowers; very effective when grown in the herbaceous border and groups among shrubbery. Graceful spurred flowers on stems 2 feet or more above the fern-like foliage.

**LONG SPURRED BLUE SHADES, SPECIAL STRAIN.** The finest strain in existence. The result of years of selecting. Huge flowers on plants from 3 to 4 feet high. This strain was bred and perfected by Waller-Franklin over a long period of years. Pkt. 35c.

**MRS. SCOTT ELLIOTT'S IMPROVED STRAIN.** One of the finest tall strains ever developed, long-spurred, large flowers, in a splendid mixture of colors. Pkt. 25c.

a, annual; b, biennial; c, climber; p, perennial; ra, rock plant annual; rp, rock plant perennial.



AQUILEGIA (COLUMBINE)



ASTER, PRINCESS TYPE

## ASTER (a)

We can imagine no other flower which combines so much beauty with grace and usefulness and with which more brilliant effects can be achieved. From July until September this flower reigns supreme in the garden, not equaled by any other. For these obvious reasons we give a great deal of attention to these flowers, and are in a position to offer our patrons remarkably fine strains, producing perfect flowers of great beauty. To do well, Asters require a well pulverized soil, always kept open by continuous cultivation. Height, 1 to 3 feet.

**PRINCESS ASTER, Wilt-resistant.** A very attractive new cutting type of wilt-resistant aster, 2-2½ ft. tall, branching and free flowering, early blooming, bearing quantities of 3-3½ in. flowers on strong stems. Flowers have a full deep crested center, surrounded by several rows of dainty plume-like guard petals. See illustration.

**Princess Anne.** Peach Blossom. Pkt. 15c.

**Princess Bonnie.** Soft salmon-rose. Pkt. 15c.

**Princess Marsha.** Rich cinnabar scarlet. Pkt. 15c.

**IMPROVED GIANTS OF CALIFORNIA.** This Aster bids fair to become a universal favorite. Characterized by the well-known Crego type of flower, combined with the Beauty Aster's long, non-lateral, branching stems, the California Giants, double type Aster, stands at the head of the list.

**Finest Mixed.** Pkt. 15c.

**SUPER GIANT LOS ANGELES.** Award of Merit, All-America Selections, 1934. The first introduction in modern Super Giant class, the flowers are fully double, 6 to 8 inches across, graceful and delicately interlaced. Long, stiff stems, bearing the large shell pink flowers smartly upright. Pkt. 15c.

**ASTER, EARLY GIANT WILT-RESISTANT, LIGHT BLUE.** Silver Medal, All-America Selections, 1939. Fully wilt-resistant, extremely large flowered and most attractive colors. Color is a rich light blue, a shade which blends in beautifully with either deeper or lighter tones. Pkt. 15c.



ASTER, CREGO TYPE

**BABY'S BREATH** (See *Gypsophila*)

**BACHELOR'S BUTTON** (See *Centaurea*)

**BALSAM**  
**Lady Slipper**  
(a)

An old and popular garden flower of easy culture. Gorgeous masses of brilliant colored double flowers are produced in the greatest profusion. Height, 2 feet.

**CAMELLIA**  
**FLOWERED.**

Finest mixed.  
Pkt. 10c.



BALSAM

**BEAN (a)**

A rapid climber, flowering profusely; grows 10 to 15 feet high. Edible as well as ornamental.

**SCARLET RUNNER.** Pkt. 15c; 1/4 lb. 30c.

**BLUE FERN FLOWER** (See *Nierembergia*)

**BRACHYCOME, Swan River Daisy (a)**

Brilliant free-flowering annual blooming throughout the Summer months and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

**Mixed Colors.** Pkt. 25c.



CAMPANULA (CANTERBURY BELLS)

**CALLIOPSIS, Tickseed (a)**

Very showy and splendid subjects for garden decoration as well as for cutting. Sow seed where intended to bloom in early Spring; thin out to 6 inches apart. Cut flowers as soon as they fade, as this prolongs the blooming season until Autumn. Height, 1/2 to 2 1/2 feet.

**GOLDEN CROWN.** Silver Medal, All-America Selections 1938. An enlarged Drummondii. A rich orange-yellow or gold of pleasing fragrance. Makes a good cut flower with 12-inch wiry stems. 15c.

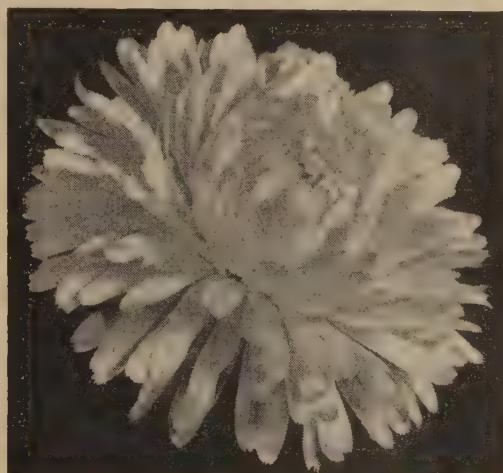
**Tall Mixed.** Pkt. 10c.

**CALENDULA, Pot Marigold (a)**

The colorful flowers make a wonderful display in the garden and are always admired by those who see them. Blooms freely in early Summer and continues into the Fall. Even though this plant prefers a sunny location and rather dry soil, it does well under widely different conditions, requiring little care to grow to perfection. 18 to 24 inches in height.

**CAMPFIRE IMPROVED.** A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms flat across top and measures 4 inches in diameter. Plants are strong growing and even in habit. Exceptionally long heavy cutting stems in generous quantity on each plant. Pkt. 15c.

**ORANGE KING.** Rich deep orange red, dark center, continuously grown and selected for over twenty-five years. A fine border specimen and excellent for cutting. Extremely large and most attractive. Pkt. 15c.



CALENDULA CHRYSANTHA

**NEW SUNSHINE CALENDULA, CHRYSANTHA.** Gold Medal

Winner, All-America Selections 1934. A clear, buttercup yellow in color with loosely arranged petals, incurved at center and reflexed at edges. Flowers mounted on strong, wiry stems a foot in length; excellent for cutting. Pkt. 10c.

**Double Mix.** Pkt. 10c.

**CALIFORNIA POPPY** (See *Eschscholtzia*)

**CAMPANULA, Canterbury Bell**

**CALYCANTHEMA (b) (Cup and Saucer).** Perhaps the most beautiful type; distinct in form, with large bell or cup-shaped flowers surrounded at the base by a large calyx of similar color, the whole resembling a cup and saucer.

**Finest Mixed.** Pkt. 10c.

**CANTERBURY BELL, MEDIUM.** A biennial. Comes in white, blue and pink shades. Rather tall growing, beautifully formed flowers, single. Blooms second year from seed, or first year from seed sown in fall.

**Finest Mixed.** Pkt. 15c.

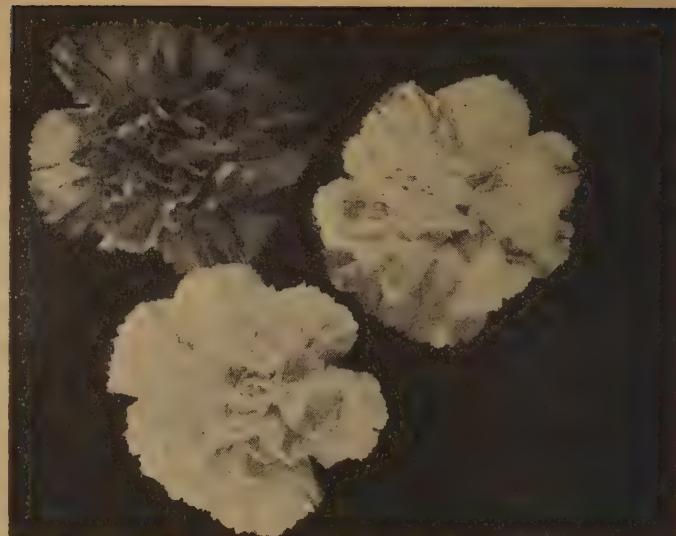
**CASTOR BEAN** (See *Ricinus*)



CELOSIA, PLUMOSA TYPE



CANDYTUFT, Giant White Hyacinth Flowered



CARNATION. CHABAUD GIANT

### CANDYTUFT (a)

Valuable for masses and edging, and considered indispensable for cutting. Seed sown in April flowers in June; successive sowings should be made at intervals. Hardy and easy to grow, blooming profusely. Height, 1 foot.

**GIANT WHITE HYACINTH FLOWERED.** Very fine for cutting. Pkt. 10c.

**UMBELLATA.** Mixed. Pkt. 10c.

### CARNATION, *Dianthus Caryophyllus*

Few flowers surpass in beauty of form or delicious fragrance, the richly hued Carnation. The plants are branching but compact, and the handsome blossoms are produced on blue-green stems that are stiff but slender. The double flowers with their thick waxy petals are spicily scented.

**CHABAUD GIANT.** 18 inches. This variety blooms six months after seeding and continues throughout the Summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of extra large size.

Mixed. Pkt. 25c.

### CARDINAL CLIMBER (ac)

Graceful climber with cardinal-scarlet blooms 1 to 1½ inches in diameter. Rich, glossy, dark green foliage. Grows 15 feet tall and is in bloom all Summer.

**IPOMOEA CARDINALIS.** Pkt. 25c.

### CELOSIA, Cockscomb (a)

Very attractive and showy, somewhat tender annual, producing massive heads in rich shades of crimson and yellow flowers. Should be started in hot beds and transplanted to rich soil after warm weather comes. Set plants a foot or more apart.

**CRISTATA.** Choice mixed; height, 9 to 18 inches. Pkt. 20c.

**PLUMOSA** (Improved Feather Type). Choice mixed; height, 2 feet. Pkt. 25c.

### CENTAUREA

Particularly well adapted for border planting. The types cultivated for their flowers have bulging calyxes from which many finely cut petals expand. Others have a downy growth on their leaves, making the foliage quite ornamental. All of them are easy culture from seed.

**CORNFLOWER, JUBILEE GEM.** Silver Medal, All-America Selections 1937. A dwarf variety of Cornflower making a compact plant literally covered with flowers. About 12 inches in height. Easy to grow. Admirable as a border plant. A fine cut flower. It may be sown outside in the autumn for spring flowering, or in the spring for summer flowering. Pkt. 15c.

**CYANUS DOUBLE** (a). (Bachelor Button). This superb class of Cornflowers produces handsome, large double blooms, effective out-of-doors and in bouquets. Height, 2 to 3 feet.

**BLUE BOY.** Pkt. 10c.

**ROSE.** Pkt. 10c.

**Mixed.** Pkt. 10c.

**SWEET SULTAN** (a). These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any fair garden soil, and your friends are sure to admire them.

Mixed. Pkt. 10c.

### CLARKIA (a)

An annual, flowering in July, which should be far more widely known. It is of easy cultivation, graceful in habit of growth, and lends itself as well to bedding as for cutting. Flowers in long racemes which open in water when cut.

**ELEGANS.** Double. Choice mixed. Height, 2 feet. Pkt. 10c.

### COCKSCOMB (See Celosia)

### COLUMBINE (See Aquilegia)

### CORAL BELLS (See Heuchera)

### COREOPSIS (p)

One of our most popular perennials; the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

**GRANDIFLORA DOUBLE SUNBURST.** Much of the beauty of early Summer gardens is due to the brilliant golden yellow of Coreopsis plantings. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. Pkt. 15c.



CORNFLOWER - JUBILEE GEM

### COSMOS (a)

No garden is complete without Cosmos. These old favorites supply a gorgeous, colorful effect during late Summer and Fall. Fine for cutting as the flowers last well in water. Cosmos are easy to grow.

**YELLOW FLARE.** Bright clear yellow, the new Yellow Flare Cosmos brings a new shade to this family. For many years gardeners have been wishing for a yellow Cosmos and here it is fresh and glowing. Single flowers  $2\frac{1}{2}$  in. across produced in great masses on 3-foot plants. Pkt. 20c.

**SENSATION PINKIE.** The finest new development in Cosmos. Flowers very large, as much as 5 inches in diameter, with broad, heavy fluted petals, slightly overlapped. Ideal for cut flowers. Sturdy plants 3 to 4 feet high, producing flowers 8 to 10 weeks from seed. Pkt. 10c.

**SENSATION DAZZLER.** A mammoth type similar to Pinkie but of a dazzling crimson shade. Very startling, true to form, immense in size. Pkt. 15c.

**SENSATION PURITY.** Purity is the glistening white Cosmos in the Sensation type as Pinkie is the delightful rose pink shade. Pkt. 15c.

**SENSATION MIXED.** Pkt. 10c.



COSMOS SENSATION

**ORANGE RUFFLES.** Semi-double. A worthy and new semi-double Orange Flare type Cosmos. Vivid and intense golden orange, the two or three extra rows of petals lend an airy butterfly-like beauty to the richly colored large blossoms. Free blooming, early flowering. Grows to a height of 3 to 4 feet. Pkt. 15c.

**EARLY DOUBLE CRESTED.** Showy plants, 3 to 4 feet tall, covered with a mass of lovely, large flowers. Our strain produces a large percentage of double blooms.

**Mixed.** Pkt. 15c.

### DAHLIAS (From Seed)

**UNWIN'S DWARF HYBRIDS, IMPROVED.** This is an improved strain of this popular flower. They grow from 18 inches to 2 feet tall and come in many delightful shades. We offer an improved strain which gives you a wider assortment of choicer colors. Produces a high percentage of doubles from seed. Mixed colors. Pkt. 25c.

**COLTNES DWARF HYBRIDS.** A very dwarf variety for bedding. This strain produces many beautiful pastel shades and a high percentage of single flowers. The finest of the Dahlias for cutting. Growing the miniature Dahlias from seed is becoming a popular garden practice. Mixed colors. Pkt. 25c.

DIANTHUS  
HEDDEWIGII  
DOUBLE



### DIANTHUS, Pinks (a)

A charming class of annual flowers for beds, borders, edgings, and cutting. The dwarf, rather compact plants average 1 foot in height. Of easiest culture, succeeding in ordinary garden loam. Blooms from July until frosts.

**SWEET WILVELSFIELD SINGLE.** A lovely, sweet scented Pink of recent introduction. Annual growing to 12 inches tall. Excellent for cutting and certainly an attraction in the garden because of its pleasing odor. Pkt. 25c.

**HEDDEWIGII LACINIATUS DOUBLE MIXED.** Superb flowers rivaling the Carnation in size and doubled blossoms. Excellent for bouquets. Pkt. 25c.

### DIANTHUS BARBATUS (See Sweet William)

### DIGITALIS, Foxglove (b)

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost all conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet.

**GLOXINIAEFLORA.** This is an improved strain of the ordinary Foxglove, with handsome spotted Gloxinia-like flowers on long spikes. **Mixed Colors.** Pkt. 15c.



DAHLIA, UNWIN'S DWARF HYBRID

## DELPHINIUM (p)

One of the greatest charms of hardy Larkspurs is in their shades of blue which range from soft rosy lavender to violet and deepest indigo. The dwarfs are valuable in the border while the magnificent tall varieties are stately and beautiful in front of a shrubby background. Above the deeply cut dark green leaves rise long floral spikes. Height, 1 to 8 feet.

**PACIFIC HYBRIDS.** A new strain of Delphiniums originated on the Pacific Coast to grow under Pacific Coast conditions. Huge flowers, 2½ to 3½ inches in diameter, beautifully spaced on well-balanced tall spikes. Highly resistant to mildew. Color range excellent and comes practically 100% Double florets. Pkt. 25c.

**WREXHAM HYBRIDS.** Without question the finest strain of large flowered hybrid Delphiniums. Various shades and color combinations in the individual flowers. Will produce amazingly large flowers and spikes. Pkt. 25c.

## DIMORPHOTHECA, African Golden Daisy (a)

The plants are of branching habit, growing about 15 inches high. An easily cultivated annual.

**AURANTIACA HYBRIDS.** The flowers are equally large, but vary in color from the purest white to yellow, orange and rich salmon shades, many being zoned with several of these colors around the black disk. Pkt. 15c.

**ORANGE IMPROVED.** Pkt. 10c.

## ESCHSCHOLTZIA, California Poppy (a)

The state flower of California and one of the most attractive low growing annuals. The foliage is finely cut, fern-like, and silvery green in color. They start to bloom in a few weeks after the seed is sown. Height, 12 to 18 inches.

**GRANDIFLORA HYBRIDS.** Large flowering varieties in the most exquisite shades of gold, copper, bronze, scarlet, purple and crimson. **Mixed Colors.** Pkt. 10c.

**AURANTIACA, ORANGE.** The ordinary California poppy. Pkt. 10c.



ESCHSCHOLTZIA

## FLAX (See Linum)

## FOUR O'CLOCK, Marvel of Peru (a)

A favorite showy annual for beds and borders. Excellent for planting in front of the porch or alongside the house. The plants bloom freely from July until frost.

**Tall, Mixed.** 2 feet tall, in many fine colors. Pkt. 10c.

## FOXGLOVE (See Digitalis)

## GAILLARDIA, Blanket Flower

**SINGLE MIXED (a).** Large daisy-like blossoms of yellow and bronze with central cones of yellow. Pkt. 10c.



PACIFIC HYBRID DELPHINIUMS

**PICTA LORENZIANA DOUBLE CHOICE MIXED.** This is a new large, double Gaillardia of recent introduction. Fine form, good color range, extremely attractive and easy to grow. Pkt. 25c.

**DAZZLER.** Large, well formed flowers, very vivid in the garden as the name implies. Golden yellow and maroon red. Striking perennial. Pkt. 15c.

## GEUM, Avens (p)

Beautiful hardy perennials, bearing profusely large, showy, double, dark crimson flowers all through the Summer. An elegant flower for bouquets. Height, 18 inches.

**LADY STRATHEDEN.** A new golden yellow with large full flowers of great beauty. Pkt. 15c.

**MRS. BRADSHAW.** Large, double, brilliant orange-scarlet. In flower throughout the entire summer. Pkt. 15c.



GEUM, MRS.  
BRADSHAW

### GODETIA, Satinflower (a)

Very handsome annual plants especially suited for semi-shady locations. Sow in Spring in the open and thin to 8 or 10 inches apart. The flowers are bright and colorful and the single sorts are not unlike the Azalea in form.

**TALL DOUBLE.** Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. **Choice Mixed Colors.** Pkt. 10c.

### ORNAMENTAL GOURDS (ac)

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments.

**Large and Small Sorts Mixed.** Pkt. 10c.

### GYPSOPHILA, Baby's Breath

**ELEGANS GRANDIFLORA (a).** London Market Improved. An improved annual strain with single large pure white flowers. Sow at intervals for a supply of flowers throughout the Summer. Height, 2 feet. Pkt. 10c.

**PANICULATA WHITE (p).** Hardy perennial with sprays of tiny rose-shaped blooms. If cut before the flowers are fully opened, sprays can be used in winter bouquets. Height, 3 feet. Pkt. 15c.

**DOUBLE WHITE (p).** Each flower double, pure white. Excellent for dry bouquets if cut and treated like the single variety. Good cut flower. Pkt. 25c.

### HELIANTHUS, Sunflower (a)

**SUN GOLD, Double Sunflower.** Dramatic and striking in beauty. All double in a brilliant golden yellow color. Blooms 4 to 5 inches in diameter, are a delight in a background planting in full sun where they will produce a vivid splash of color in mid-summer. Plants reach a height of 4 to 5 feet depending upon soil and climate. Very free flowering. Pkt. 15c.

### HELICHRYSUM, Straw Flower (a)

The finest of all Everlastings. They make unusually fine Winter bouquets if cut when partially opened and dried slowly in a cool place, heads downward to keep the long stems straight. The centers of the double pompon-like flowers are nearly covered by the stiff overlapping petals. A wide range of brilliant and soft colors. Height, 2 to 3 feet.

**Finest Mixed.** Pkt. 10c.

### HEUCHERA, Coral Bells

A perennial growing 1½ to 2 feet. We offer a new strain of Coral Bells in a rich scarlet hue. Bell shaped blooms on slender spikes 12 to 18 inches long. Blooms from June to September. Fine for borders, rock gardens and for cutting. Best if left undisturbed in a secluded area of the garden. Spreads rapidly but never a pest. Pkt. 35c.



HEUCHERA (CORAL BELLS)



GYPSOPHILA (BABY'S BREATH)

### HOLLYHOCK, Althaea (p)

The beautiful color effects produced by the planting of these flowers, render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet.

**INDIAN SPRING.** Silver Medal, All-America Selections, 1939. Semi and double flowers of bright rose and rosy carmine. Its many flowered branches produce a continuous show until frost. Flowers first year from seed. Pkt. 15c.

**DOUBLE TRIUMPH MIXED.** Beautifully fringed rosette flowers in many new shades and bi-color combinations. Pkt. 15c.

### IBERIS (See Candytuft)

### ICELAND POPPY (See Poppy Nudicaule)

### IPOMOEA, Morning Glory (ac)

**SCARLETT O'HARA.** Gold Medal, All-America Selections 1939. An entirely new color in the popular Morning Glories—rich dark wine red or deep rosy crimson. Flowers 4 inches in diameter, freely produced on fast growing vines. The dark green foliage does not make a heavy growth, leaving plants graceful in appearance. Pkt. 15c.

**PEARLY GATES.** Silver Medal, All-America Selection 1942. A big, satiny white morning glory with a creamy shading in the throat. Early blooming climber, literally covered with lovely flowers. Company to Clark's Early Heavenly Blue. Pkt. 15c.

**CLARK'S EARLY HEAVENLY BLUE.** A variety that is bringing new popularity to Morning Glories. It is an early blooming climber, literally covered with lovely flowers of sky-blue. Flowers 2½ inches across and blooms until frost. Pkt. 10c.

**MIXED IMPERIAL.** These are beyond question the handsomest of all Morning Glories. The flowers are of gigantic size and their colorings beyond description. Pkt. 10c.



HELICHRYSUM (STRAWFLOWER)



LUPINE

### LARKSPUR (a)

Annual Delphiniums are adorned with finely cut, feathery foliage which set off to advantage the handsome long floral spikes of double blossoms. The colors range from pure white through soft shades of lavender and pink to deep blue.

**GIANT IMPERIAL.** Tall, upright, compact, basal branching in habit, the Giant Imperials have superseded all other types of Larkspurs for general garden use. Their delphinium-like spikes of double florets are carried on stout stems 4 to 5 feet

**WHITE KING.** Special Mention, All-America Selections, 1937. The flowers are a pure, glistening white, with extremely large double florets, sometimes measuring 2 inches across, evenly spaced on the stem. Early, the finest Larkspur. Pkt. 15c.

**BLUE SPIRE.** Very deep violet blue. Outstanding blue. Pkt. 15c.

**PINK PERFECTION.** The 2-inch florets of rounded broad petals are evenly and closely spaced on the stem, giving a very heavy Hollyhock-like cutting spike 24 inches or more in length. Color is a very luscious shade of lively light pink. Pkt. 15c.

**Finest Mixed.** Pkt. 10c.

### LINARIA, Miniature Snapdragon (a)

This interesting species bears flowers which resemble miniature Snapdragons ending in single elongated spurs. It includes both trailing and erect growing varieties which are little known but worthy of greater attention. Height, 8 to 18 inches.

**MAROCCANA MIXED.** This is an erect sort with finely cut foliage and with blossoms clustered on upright spikes. The colors which are varied embrace many shades of crimson, orange, and blue. The plant is in flower within two months. Pkt. 15c.



MARIGOLD, FLASH

### LINUM, Flax (a)

**GRANDIFLORUM RUBRUM.** An old favorite with large, rich crimson blooms borne profusely on plants growing 18 to 24 inches tall. Though the flowers last only one day, new ones appear every morning. Pkt. 10c.

**PERENNIAL BLUE.** A beautiful shade of Blue Linum (Flax), grows to 2½ feet. Fine for borders. Thrifty grower, adapts itself to most any type of soil. Pkt. 10c.

### LOBELIA (a)

A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hanging baskets or window boxes. Height, about 6 inches.

**COMPACTA, CRYSTAL PALACE.** Erect and very free blooming. Best dark blue for edging. Fine for pots. Pkt. 15c.

**HYBRIDA PENDULA SAPPHIRE.** A trailing annual useful in pots and flower boxes where it can trail over the edge and display its beautiful deep blue, white-eyed flowers. Pkt. 15c.

### LUPIN, Sun Dials

Thrive in almost any situation. Sow where they are to bloom in May, and as plants grow, thin out to 1 foot apart.

**RUSSELL LUPINS.** Long, closely furnished spikes flower in a great variety of rich colors—deep yellows, oranges, reds, and brilliant bi-colors never seen in Lupins before. The florets are large with a flat fan-like back-standards, and unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. Awarded the Royal Horticultural Society's Gold Medal, June, 1937. Pkt. 25c.

### MARIGOLD (a)

**FLASH.** A new single type of Marigold, blooms 8 weeks from seeding and continues all summer and fall. Never have we seen a Marigold so uniform in habit nor one which blooms so profusely. Individual flowers of this new single French Marigold grow 1¾ inches and more across; the plants 18 inches tall. Fine for beds, borders and cut flowers. Easy to grow. Pkt. 25c.

**SCARLET GLOW, Dwarf French Double Marigold.** Grows to a height of 12 inches, bearing a profusion of mahogany red blossoms turning to orange scarlet. Very attractive as a border specimen. You'll enjoy this colorful Marigold as it is covered with colorful blooms from the start of the season until frost. As in the case of all flowers, Scarlet Glow will bear through the entire season if you'll keep the faded blooms picked. Pkt. 15c.



MARIGOLD, SCARLET GLOW

## MARIGOLD (Continued)

**SPRY.** The most profuse blooming of all Marigolds. Extremely dwarf and compact, their maximum height being 9 inches and their spread 15 inches. Flowers are composed of a pincushion crest. Center bright, clear yellow and guard petals are a lovely contrasting mahogany-red. Pkt. 15c.

**MINIATURE, YELLOW PYGMY.** Honorable Mention. All-America Selections, 1940. Light lemon yellow. Lilliput French double type, growing only 8 inches tall and compact. Small, 1 1/4 inches, blooms rather free. Excellent for edging and potting. Pkt. 15c.

**GIGANTEA, FULL DOUBLE MIXTURE.** Very showy, fragrant, and of exceptional size. Flowers are largest ever known in Marigold group, averaging 5 to 7 1/2 inches. A mixture ranging from deep orange through golden orange, deep golden yellow, light yellow, lemon yellow, and a delightful new shade of primrose. Pkt. 15c.

**AFRICAN TALL DOUBLE** (*Tagetes erecta*). Very large globular flowers composed of compact tubular or quilled petals. The stems should be cut carefully to avoid the somewhat disagreeable odor when bruised. Grows 2 1/2 feet tall. Comes in two shades; orange and yellow. Please specify which color or if mixed colors are desired. Pkt. 15c.

**Mixed Colors.** Orange and yellow. Pkt. 10c.

**HARMONY HYBRIDS (All-double).** An improved Harmony type. Wide and varied range of striking color combinations embracing mahogany, orange and yellow. Flowers 1 3/4 inches in diameter with crested center and flanking guard petals. Very early and 100 per cent double. This is an exceptional improvement in medium-dwarf French type marigolds. Pkt. 20c.

**DWARF FRENCH, DOUBLE, MONARCH STRAIN.** Award of Merit, All-America Selections, 1934. An excellent variety for low borders. A very compact type, with large double flowers, in a wide range of colors, in combination of orange, bronze, yellow and mahogany.

**Finest Mixed.** Pkt. 15c.

## MARVEL OF PERU (See Four-o'clock)

## MORNING GLORY (See Ipomoea)

## MOSS ROSE (See Portulaca)

## NEMESIA (ra)

This plant is excellent for edging purposes. Plants send up many slender stalks crowned with fairy-like flowers, something like the *Schizanthus*. When the flowers fade they may be trimmed back and will bloom again. Their colors run from the brightest reds, yellows, oranges, to the brightest blues and purples. Height, 6 to 12 inches.

**COMPACTA TRIUMPH, FINEST MIXED COLORS.** Pkt. 15c.



NEMESIA

## NEMOPHILA

**BABY BLUE EYES.** A quick grower; early bloomer. Bears a profusion of lovely cup-shaped, sky blue flowers with white centers. Charming for the rock garden or for ground cover among tulips and narcissi and for edging. Plants grow 6 to 8 inches tall. Pkt. 15c.

## NIEREMBERGIA HIPPOMANICA (ra)

**NIEREMBERGIA, PURPLE ROBE.** Bronze Medal, A. A. S. 1942.

*Nierembergia*, Purple Robe, a very fine deep violet-purple shade, which maintains its deep color even in full sun and does not fade in the hottest climate. The plant is a neat compact extremely free-flowering one; is only 6 inches tall, with a mature spread of some 10 to 12 inches. A half-hardy perennial, Purple Robe blooms the first year from seed, but must be sown early indoors, for it takes 15 weeks from seeding to flowers. Pkt. 25c.



NASTURTIUM, GLORIOUS GLEAM

## NASTURTIUM (a)

**GOLDEN GLEAM.** Plant forms a vigorous large bush which throws out short runners, averaging 18 inches. The sweet scented, large double flowers are golden yellow and average 2 to 3 inches across. Pkt. 10c; 1 oz. 35c.

**SCARLET GLEAM.** A sister of Golden Gleam. Its semi-double blossoms are similar in size and shape to those of the popular golden Nasturtium. Rich, dazzling scarlet. Sweet scented. Fine for cutting. Pkt. 10c; 1 oz. 35c.

**GLORIOUS GLEAM HYBRIDS.** Award of Merit, All-America Selections, 1935. Delightfully sweet scented; double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise, cream, orange, maroon and crimson shades, and many spotted varieties.

**Mixed Colors.** Pkt. 10c; 1 oz. 45c.

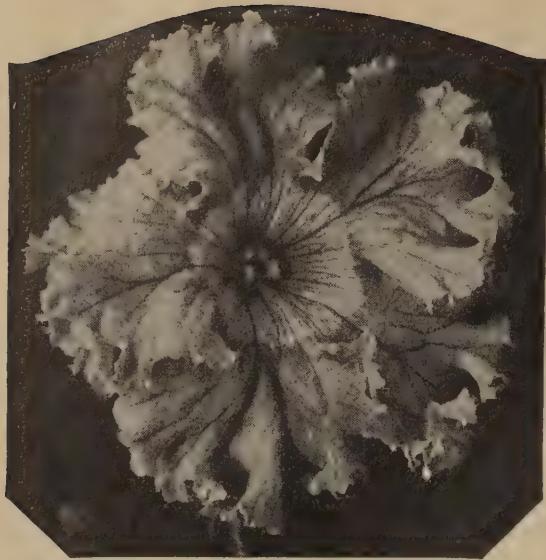
**DWARF DOUBLE GOLDEN GLOBE.** Award of Merit, All-America Selections, 1936. Vivid golden yellow, identical in color to Golden Gleam. Plants uniformly dwarf and compact, and bear great quantities of semi-double sweet scented flowers. Excellent for edging and window boxes. Pkt. 15c.

**DWARF DOUBLE GEM MIXTURE.** Novelty introduction, 1935. An evenly balanced range of colors on dwarf, compact gem-like plants. Ideal annual for border and edging use. Plants are dwarf and compact, totally without runners.

**Mixed Colors.** Pkt. 15c.

**TALL OR CLIMBING NASTURTIUMS.** For covering trellises, fences, arbors, piazzas, trailing from vases, over rock-work, etc., nothing can equal their great quantities of bloom from early Summer until frost. The seed pods can be gathered while green and tender for picking. Height, 8 to 10 feet.

**Finest Mixed.** Pkt. 10c.



PETUNIA, RUFFLED

#### PETUNIA (a)

The seed may be started indoors early in the year in seed boxes and later transplanted or sown out of doors in the Spring. Cover very lightly and apply water with a fine spray. Be careful not to discard the smaller and weaker seedlings. From these the finest flowers are often obtained, the coarse growing plants frequently reverting to the common types.

**CREAM STAR.** Silver Medal, All-America Selections, 1940. Flowers shaped like a five-pointed star; soft creamy white, deepening towards the throat to a bright golden yellow. The compact habit of the plants makes Cream Star Petunia ideally suited for low beds. Plants bloom about 20 weeks after seed is sown. Pkt. 25c.

**PETUNIA HYBRIDA NANA ERECTA.** 1 foot. A fine type of petunia for small beds and borders; often used for pot culture. This petunia type holds its habit very well during the entire blooming season.

**ROSY MORN.** Soft rose-carmine-pink with a white throat. Dwarf growing and a luxuriant bloomer. Pkt. 15c.

**MIXED HYBRIDS.** A very decorative show may be had by sowing these mixtures. All colors combine to make a very fine Display. Pkt. 15c.

**FLAMING VELVET.** This is a very large grandiflora single type with plain edge identical to the erecta type hybrids. The color is luscious velvety blood red. Flaming Velvet is one of the most satisfactory petunias both for vigorous growth and beauty of color. Pkt. 35c.

#### SINGLE BALCONY PETUNIAS

A splendid large and free-flowering type for window boxes, vases, hanging baskets, etc. The flowers average 3 inches.

**DEEP BLUE.** Certificate of Honor, Royal Horticultural Society, 1935. Pkt. 10c.



DWARF BEDDING PETUNIA, CREAM STAR

**ROSE.** Rich fiery rose. Pkt. 10c.

**WHITE.** Award of Merit, Royal Horticultural Society, 1935. Pkt. 10c.

**Mixed Colors.** Pkt. 25c.

#### GRANDIFLORA SINGLE FRINGED

**THEODOSIA.** Soft rosy pink with contrasting veined golden yellow throat. An outstanding variety in this class. Pkt. 25c.

**ELK'S PRIDE.** This is by far the finest, largest, darkest, and best velvety purple in the single group of petunias. Pkt. 25c.

#### RUFFLED GIANTS OF CALIFORNIA

**GLAMOUR.** Glamorously lovely, this outstanding Petunia is a number one favorite with all who have seen it. A luscious shade of salmon rose, delicately veined brown in creamy open shallow throat, the five to six inch blooms have satiny petals heavily ruffled and unusually dainty. Plants develop to 2 to 2 1/2 ft. A new color in this type of Petunia. Pkt. 50c.

**SUPREME STRAIN.** A new strain of rose and pink shades, light, richly-veined throats surrounded by satiny petals which are heavily ruffled. Large blooms, 5 to 7 inches in diameter, produced on strong, richly-foliaged plants. Excellent bedding variety; fine window box type. Pkt. 25c.



PANSY, STEELE'S GIANT

#### PANSY, Heart's Ease (b)

When the bright hues of the Tulips and Daffodils have faded, the rich, deep and varied shades of the Pansies provide a welcome change in the flower beds. The varieties listed produce large blooms of good substance, regular markings, and full rich coloring. Low growing.

**STEELE'S JUMBO.** Many new and unique colors will be found in this mixture, pastel pinks, apricots, yellow, blues, brass tones, copper bronze, purple, red, in two and three color combinations and selfs. Fine form, heavy substance, long strong stems, fine for cutting and forcing. Very early. Pkt. \$1.

**SWISS GIANT.** Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and they produce immense circular flowers for a long blooming season.

**Finest Mixed.** Pkt. 35c.

**POPULAR BEDDING MIXTURE.** These are the popular saucy-faced beauties that everybody loves, comprising the finest in all colors. Pkt. 25c.

## PHLOX DRUMMONDI (a)

A valuable and showy annual highly esteemed for bedding, for massing and for borders. The plants grow about 1 foot high, thrive in practically any soil if given a sunny location and bloom the entire season. Seed may be started in boxes and transplanted or sown in the open in Spring.

**GIGANTEA, RED GLORY.** Here is the brightest color that we have ever seen in phlox. The color is a brilliant red with a large creamy white eye which seems to intensify the red into an unbelievable sharpness. Florets often as large as a half dollar. Pkt. 25c.

**GIGANTEA MIXED.** A new strain of annual Phlox with single florets as large as an inch and one-half in diameter. The colors are soft pastel shades, such as apple blossom pink, salmon, light blue, pale violet, etc. Pkt. 10c.



ANNUAL PHLOX



PORTULACA (MOSS ROSE)

## PORTULACA, Moss Rose (ra)

Brilliant hardy annual, of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Flowers of the brightest colors. Height, 6 to 10 inches.

**DOUBLE MIXED.** Pkt. 25c.

**SINGLE MIXED.** Pkt. 15c.

## PINKS (See Dianthus)

## POPPY, Papaver

Annual Poppies should be sown as early as possible in the Spring where they are to remain as they do not transplant readily. Mix the seed with builders' sand, using about 25 times as much sand as seed, then broadcast seed on surface of the ground and firm well. Plants should be thinned out to 6 inches apart for best results. Seed may be sown in rows also and in succession up to the middle of May.

**ALL-DOUBLE MIXED.** Improved strain of all-double Begonia-type flowers. Range of colors from light pink to dark crimson with fair sprinkling of Picotee types in scarlet and vermillion shades. One of the most excellent flowers for mid-summer bloomers and for cutting. Pkt. 10c.

**SINGLE MIXED.** A superb blend of this beautiful type of Poppy ranging in color from pure white through tones of salmon, pink, and rose to brightest carmine-red. Pkt. 10c.

**NUDICAULE (p) (Iceland Poppy).** A hardy Poppy slightly resembling the Shirley. Somewhat different in habit and contains many shades of yellow and orange. Height, 18 inches.

**IMPERIAL JEWELS, MIXED.** The finest strain of mixed colors in Iceland Poppies. The colors are well balanced. Large flowers grow on strong stems from 2 to 3 feet high. Pkt. 35c.

## PYRETHRUM, Painted Daisy (p)

This plant is cousin to the Chrysanthemum and Matricaria and should play an important part in many a well planned garden. Height, 1 to 2 feet.

**SINGLE MIXED.** Radiating petals in many tones of rose and red about a golden center. Pkt. 20c.

## RICINUS, Castor Bean (a)

Magnificent, tall, large-leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

**MIXED VARIETIES.** Pkt. 10c.

## SALPIGLOSSIS, Painted Tongue (a)

For delicate grace, richness of coloring, and velvety texture, the regal Salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear one or more large Lily-like flowers in a magnificent range of colors. Height, 1 to 2½ feet.

**SUPERB MIXED.** Pkt. 10c.

## SALVIA

**BONFIRE.** This variety grows about 2 feet tall and produces scarlet red blossoms from late summer to frost. The brilliant flower spikes are very attractive, growing very erect and globular. Pkt. 25c.



ICELAND POPPIES

### SCABIOSA, Pincushion Flower (a)

These beautiful hardy annuals are in great demand. They grow about 2½ feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are very popular. Seeds should be sown any time in the Spring after danger of frost is past.

**SALMON BEAUTY.** Pure salmon with huge flowers. Vigorous. The stems are long and stiff, making it a most popular flower for the garden or for cutting. Pkt. 15c.

**IMPERIAL GIANTS, BLUE MOON.** Honorable Mention, All-America Selections, 1939. An entirely different and improved flower and plant from the existing Scabiosa varieties. Fully double extremely large and deep. Petals broad, heavy, and wavy, entirely eliminating the pincushion center, rich deep lavender blue. Tall growing and very upright. Pkt. 15c.

**GIANT HYBRIDS, MIXED.** Pkt. 10c.

### HARDY PERENNIAL VARIETIES

**CAUCASICA.** Giant Hybrids (Isaac House Strain). Fringed and ruffled, shades of blue from lavender to dark blue; very large flowers. Pkt. 25c.



SCHIZANTHUS

### SCHIZANTHUS, Butterfly Flower (a)

One of our finest hardy annuals. Of easy culture in any good garden soil. Showy flowers of various colors, closely resembling some species of Orchids. Also useful as pot plants for late Winter and Spring; for this purpose sow in Autumn.

**BUTTERFLY MIXTURE.** Fine bright mixture, free flowering, compact pyramidal plants, 12 to 15 inches. Pkt. 10c.

### SHASTA DAISY, Chrysanthemum Maximum (p)

It is a hardy plant bearing large white, single blooms with handsome yellow centers. They are valuable for border decoration and especially pleasing in bouquets.

**DIENER'S DOUBLE.** A new Shasta Daisy of delicate double form. Diener's Double Shasta Daisy is of exquisite form, a strong grower and a welcome addition to this branch of the flower family. Pkt. 25c.

**ALASKA.** Pure white, extra large flowers. Excellent for cutting. Height, 2 feet. Pkt. 15c.

### STOCKS, Gilliflower (a)

These popular flowers are easily grown, are so highly fragrant, and of such great beauty that they deserve a place in every garden. The Early Giant Imperial class are half-hardy annuals.

**DWARF TEN WEEKS.** This early class forms dwarf compact plants that are excellent for edging or low beds. They often do well in sections where plants of the later types cannot be grown. 12 inches tall. Mixed colors. Pkt. 15c.

**GIANT IMPERIAL** (Column Stocks). Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in habit, except that the plant is less spreading and taller. Height, 2 feet. (See color illustration on front cover.)

**Finest Mixed Colors.** Pkt. 10c.



STOCKS, DOUBLE GIANT IMPERIAL

**SNAPDRAGON** (See *Antirrhinum*)

**STRAWFLOWER** (See *Helichrysum*)

**SUNFLOWER** (See *Helianthus*)

**SWEET SULTAN** (See *Centaurea*)

### SWEET WILLIAM, *Dianthus Barbatus* (b)

A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20 inches.

**NEWPORT PINK.** Watermelon pink or salmony rose color. Very beautiful. Pkt. 15c.

**Single Varieties, Mixed.** Pkt. 10c.

**Double Varieties, Mixed.** Pkt. 10c.

### TITHONIA

**TITHONIA (Golden Flower of the Incas).** Sometimes called Mexican Sunflower. We offer only the Speciosa Early Flowering strain. Color orange vermillion, large single flowers, strong heavy growth, attractive late summer and fall bloomer. Pkt. 15c

# SWEET PEAS

## CULTURE OF SWEET PEAS

**CULTURE**—First and most important, plant as early in the spring as the conditions will permit. Seeds should be sown at the rate of one ounce to 25 feet. Make a trench about 3 or 4 inches deep, planting seeds in the bottom about 2 inches deep, pressing the soil firmly. After the plants are well up, thin to 4 or 5 inches apart and draw the soil around them until the trench is filled above the level. This gives a depth to the roots, preserving the moisture. Keep the ground well worked and water if needed, an occasional soaking down being better than a daily sprinkling. Keep the flowers cut close.

**FALL SOWING OF SWEET PEAS**—In warmer climates, fall sowing results in finer blooms, particularly where hot summers prevail and tend to dwarf growth and stunt flowers. You'll enjoy larger blossoms on longer stems through fall planting. In early October, plant in mellow, enriched soil, inoculating the seed with NITRAGIN before planting (see page 34). You may trench if you choose, but trenching is not necessary in warmer climes.

### SPECIAL MIXTURE SPENCER SWEET PEAS

This is our special mixture and is a blend of the most beautiful colors in Spencer Sweet Peas.

Pkt. 10c; oz. 35c

### GIANT FLOWERING SPENCERS

Prices on following varieties are:  
10c Pkt., 50c oz., postpaid

#### PINK AND ROSE SHADES

**PINKIE.** Rose-pink with large and frilled flowers. This variety is seldom affected by weather conditions and first-class blooms can be cut all during its long blossoming period. Silver Medal.

**YOUTH.** This Sweet Pea can be described as a white ground Picotee but with slightly deeper color on the edges than its predecessor in this group. Strongly perfumed.

**ULLABY.** Charming shade of light rose pink. A strong grower. Award of Merit. National Sweet Pea Society, 1934.

**PEGGY ANN.** A late flowering variety of great beauty and distinction. A new and glowing shade of salmon pink. Most bewitching under artificial light. Delightfully perfumed. The stems are very long and stout with four huge blooms to a stem.

#### LAVENDER AND BLUE SHADES

**AMBITION.** Rich deep lavender, with a darker shade on the base of the standard and wings when young, lessening as the bloom ages. Gold Medal and Award of Merit.

**POWERSCOURT.** A clear pure lavender. Has been considered the best lavender for a number of years. It is still the most popular. The flowers are very pure in color.

**REFLECTION.** A clear blue unlike any blue sweet pea you've ever seen. The color is sunproof, delicate and very sweet scented. A recent introduction.

**CHINESE BLUE.** Chinese Blue is a solid, rich, deep blue without the objectionable fading out on the edges. The stems are long and bear four blooms throughout. Plants are strong and vigorous with a blooming season longer than that of the average Sweet Pea.

#### WHITE AND CREAM SHADES

**GIGANTIC.** Pure white flowers of perfect form and of great substance. Normally produces five-flowered stems when grown under ordinary conditions. Black seeded. Award of Merit.

**avalanche.** Immense glistening white flowers. The blooms are very frilled. White seeded.

**WHAT JOY.** Primrose, shading to cream. A charming tone and so far the nearest approach to a true yellow.



#### ORANGE AND SALMON SHADES

**GEORGE SHAWYER.** A giant orange pink, the standard showing more orange than the wings. The flowers are perfectly formed and nicely placed. Award of Merit.

**SMILES.** Clear glistening salmon, best describes this exquisite variety. The large flowers are beautifully waved and fluted. Award of Merit.

#### CERISE SHADES

**MRS. A. SEARLES.** Salmon-cerise, merging into a soft oriental-red. A remarkable and distinct color. No collection is complete without this beautiful Sweet Pea.

#### RED SHADES

**RED BOY.** The very best crimson. It is a first class Sweet Pea for all purposes, especially for general garden culture. Award of Merit.

**WELCOME.** By far the best and most brilliant, dazzling, scarlet Sweet Pea. For exhibition or gardens it is supreme. Absolutely sunproof. Silver Medal, Scottish National Sweet Pea Society

## PERENNIAL SWEET PEAS

(*Lathyrus Latifolius*)

Climbing plant with showy clusters of sweet pea-like flowers. Blooms from June until September if not allowed to go to seed. Desirable for training on fences, arches, etc.

White, pink, red or mixed, 10c pkg.

### VIOLA, Tufted Pansies (a)

**WALLER FRANKLIN FORMULA MIXTURE.** This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supreme mixture. Pkt. 25c.

## VIRGINIAN STOCKS, French Forget-me-nots (ra)

Small red, rose and white flowers about  $\frac{3}{4}$  inch across. Fine for edgings. For continuous display until Fall, several successive sowings should be made about two weeks apart. Height, 6 to 8 inches. Mixed colors. Pkt. 15c.

## VERBENA (a)

One of the most popular garden annuals for beds and massing and for a gorgeous display during the Summer months cannot be excelled, commencing to flower in July and continuing until frost. Height, 6 to 8 inches.

**SPECTRUM RED.** The brightest Verbena in existence. The huge flowers are an intense bright red having no eye, the color is intensified and its brilliance is quite dazzling. Pkt. 15c.

**FLORADEL BEAUTY.** Special Mention, All-America Selections, 1937. A giant hybrid, the flowers varying from bright rose-pink to deep rose-red of exceptionally brightness. Individual florets of perfect form, fully rounded, and average  $1\frac{1}{4}$  inches across; heads or trusses 4 to 5 inches across. Pkt. 15c.

**Finest Mixed.** Pkt. 10c.

## ZINNIA (a)

One of the most satisfactory and showiest of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in the Summer and continue until frost.

**DOUBLE DAHLIA FLOWERED ZINNIAS.**  $2\frac{1}{2}$  feet. Enormous flowers are produced by robust branching plants. The flowers usually have slightly hollowed centers ringed with small tubular florets. The petals are quite loosely placed and tend to curl at the edges, giving the blossoms a crisp, fresh appearance. The following are the cream of the colors in Dahlia Flowered Zinnias.

**WILL ROGERS.** A recent introduction of very brilliant color and grand form. Lovely, brilliant scarlet-red. You'll like the color. Pkt. 10c.

**CRIMSON MONARCH.** Deep crimson, large flowers. Pkt. 10c.



ZINNIA, LILLIPUT



ZINNIA, DAHLIA FLOWERED

**DREAM.** Deep rosy lavender. Pkt. 10c.

**CANARY BIRD.** Golden yellow. Pkt. 10c.

**ORIOLE.** Orange and gold bicolor. Pkt. 10c.

**POLAR BEAR.** White. Pkt. 10c.

**SCARLET FLAME.** Bright scarlet. Pkt. 10c.

**MIXTURE OF ABOVE.** Pkt. 10c.

**CALIFORNIA GIANT ZINNIAS.** This variety is taller than the dahlia flowered type, growing 3 to 4 feet, with long stems which make the flowers fine for cutting. Blooms are large and flat and very graceful for their size. We recommend California Giants to those who really enjoy zinnias. Improved since their introduction in 1926, they are now exquisitely beautiful in form and color. We offer this sort only in the mixed, believing that the blend of colors will please the most exacting flower lover. Finest shades mixed. Pkt. 10c.

**MISS WILMOTT.** California Giant Zinnia. A soft two-toned pink, darker at the edges, lighter shade of pink at the center with bright eye. A very attractive Zinnia; one you'll get a full measure of pleasure from, either as a cut flower or as a garden plant. Pkt. 15c.

**LAVENDER QUEEN.** California Giant Zinnia. A deep rosy, lavender. Planted together with Miss Wilmott, the combination produces a very beautiful color picture. This is a pastel shade (as is Miss Wilmott) and the two combine beautifully in a bouquet or in the border. Pkt. 15c.

**FANTASY WILDFIRE.** A rich, dazzling scarlet. Wildfire adds a distinct note of color and cheerfulness to the garden and will enliven any home when used in flower arrangements. Plant neat in habit, strong growing, and very free blooming;  $2\frac{1}{2}$  to 3 feet in height; coming into flower 45 to 50 days after seed is sown. Pkt. 15c.

**FANTASY STAR DUST.** Silver Medal, All-America Selection, 1937. The lovely golden yellow variety in the popular Fantasy type Zinnias. Informal, shaggy-petaled, medium-sized flowers on plants  $2\frac{1}{2}$  to 3 feet in height; stems of good length for cutting. Pkt. 15c.

**FANTASY MIXED SHADES.** Pkt. 15c.

**LILLIPUT PASTEL MIXTURE.** When we think of flowers for cutting, our minds automatically turn to the pastel shades. In this blend of tiny or baby zinnias are incorporated the very lovely soft shades of apricot, peach, creamy yellow, shell pink, delicate salmon, light rose and orchid which are prime favorites with florists, cut flower growers and those who grow and arrange flowers for the home. Don't fail to include a packet or two of this Lilliput Pastel Mixture with your order. Pkt. 15c

# GLADIOLUS

OUR BULBS ARE  
FUMIGATED TO  
DESTROY THIRP.  
BEST QUALITY!

The Following Varieties 90c Doz.; \$6.50 per 100

**MARGARET BEATON.** Clear white, small scarlet blotch in throat.

**MAID OF ORLEANS.** Color creamy-white with a distinctive light cream shade in the throat. The best commercial white. Fine for cutting.

**LADY JANE.** Beautiful cream with light yellow lower petals. Very large.

**CORONA.** Creamy white shading somewhat deeper in the throat with rose picotee edge on the petals. Very distinctive and beautiful.

**ROSE MORN.** Very large flowers of bright coral rose. White throat.

**ROSA VAN LIMA.** Best in its color class. A deep, rich color that combines well in bouquets. Light rose with darker shadings.

**CORILLION.** Ruffled flowers of a beautiful light rose color.

**PICARDY.** Color soft apricot pink with a silvery sheen, feathering of slightly deeper color in the throat. The individual florets are large, slightly ruffled and of a heavy wax-like substance.

**PINOCCHIO.** Ruffled salmon. Buff green throat. A distinct novelty.

**BIT O' HEAVEN.** 17 first awards. Tall, primulinus hybrid orange. Ranks first in its color class.

**COMMANDER KOEHL.** Large dark scarlet red without markings or blotches. Very large florets.

**BEACON** (Palmer). Clear bright rose-scarlet with a large cream blotch; medium large, slightly ruffled, 8 to 10 open on a very tall, straight spike.

**MONETTE.** Large flowered, deep yellow. Vigorous grower. Best yellow in its class. A large bloom, not the small type.

**MATOAKA.** Deep maroon black. Very tall and strong.

**KING LEAR.** Clear, deep reddish purple with silver line on edge of petals. 5-6 blooms open on a tall, strong, slender spike.

**MISTY DAWN.** Fine large smoky rose ash and salmon.

**BLUE BEAUTY.** Light blue, shading darker toward edges. Giant flowers of exquisite form. 45 first awards. Unexcelled.

**BADGER BEAUTY.** Finest exhibition lavender.

## NEWER GLADS

A selection of the finest of the more recent introductions  
3 for 45c; \$1.75 per Doz.

**RED CHARM.** Finest deep red. Huge spikes.

**HARMONA.** Salmon scarlet. Good.

**ELIZABETH THE QUEEN.** Ruffled lavender.

**SUMMER WEALTH.** Large deep pink.

**STELLA ANTASDALE.** Huge spikes of light pink.



## TIP-TOP GLAD MIXTURE

In this mixture we give you only the choicest of varieties at a price that will permit of volume buying. We assure you an assortment of the latest sorts and finest colors. Prices, postpaid, 80c doz., \$5.50 per 100.

# TUBEROUS BEGONIAS

Great care is exercised in the selection of our Begonia tubers. Only the strongest tubers are chosen for you . . . tubers that are sure to bloom profusely and produce for you the largest, more robust plants and blossoms. Begonia tubers are available in February through May. Plant early indoors in pots or flats using leaf mold. When frost danger is over, move to the open garden. Protect from the hot sun and water regularly and often. Peat moss makes an ideal humus medium if you are unable to obtain leaf-mold. Order early. The demand is heavy. Delay might mean disappointment.



CARNATION FLOWERED

**CARNATION TYPE BEGONIA.** Include this variety in your collection. Flowers are laciniate and very much resemble a mammoth Carnation. Available in scarlet, rose, pink, salmon, yellow and white.

## HANGING BASKET

**TYPE.** Plant several tubers in an 8- or 10-inch hanging basket or pot. We suggest that you plant tubers in a mixture consisting of one-third each of well rotted manure, leaf mold or peat mull and sandy loam. Available in scarlet, rose and white.

## DOUBLE CAMELLIA

**BEGONIA.** Large full double flowers of exquisite form. We illustrate four colors of this type on the inside front cover. For sheer



CAMELLIA FLOWERED

beauty of form and color, Double Camellia Begonias have no equal. They are breath-taking. Available in white, yellow, salmon, apricot, orange-scarlet, rose-red, salmon-rose and rose-pink. Be sure to indicate your color preference when ordering.

## SINGLE FRILLED BE-

**GONIA.** Large single flowers with the petals profusely ruffled and frilled. A very beautiful form. Available in separate colors of orange, salmon, scarlet, white. Single Begonias have an appeal to those who cherish and prefer single flowers. Colors are bright, good form, very fine foliage.

## DOUBLE PICOTEE.

A beautiful camellia type blossom with the edges of each petal in a different shade of color. Colors are pink, rose and salmon.



BEGONIA PLANTING

SINGLE FRILLED

Except as noted, prices are identical on all types: Extra large tubers 35c each; \$3.50 per dozen postpaid  
On orders less than \$2.00 add 25c packing charge

# NORTHWEST GROWN HARDY ROSES

## PATENTED VARIETIES

**CALIFORNIA** (Pat. No. 449). Glorious shade of ruddy orange with saffron-yellow. \$1.50 ea.

**CHARLOTTE ARMSTRONG** (Pat. No. 455). Magnificent flowers of cerise red. \$1.50 ea.

**CRIMSON GLORY** (Pat. No. 105). Deep velvety crimson, very fragrant and long lasting. \$1.50 ea.

**HORACE McFARLAND** (Pat. No. 730). Light coral-red buds open to a full petaled flower of salmon-buff. \$1.50 ea.

**LOWELL THOMAS** (Pat. No. 595). Magnificent high centered blooms of gold yellow. \$1.50 ea.

**MIRANDY** (Pat. No. 632). A gorgeous fragrant chrysanthemum red rose with big ovoid buds. \$1.50 ea.

**MME. CHIANG KAI-SHEK** (Pat. No. 664). High-centered flowers of clear canary-yellow, creamy outer petals. \$1.50 ea.

**MME. HENRI GUILLOT** (Pat. No. 337). Deep raspberry to watermelon pink, richly fragrant. \$1.50 ea.

**PEACE** (Pat. No. 591). Buds of yellow, cerise-edged, disclose new iridescent beauty at each stage of opening. \$2.00 ea.

**REX ANDERSON** (Pat. No. 335). A delicate ivory-white exhibition rose; perfectly formed. \$1.50 ea.

**RUBAIYAT** (P.A.F.). Graceful brilliant red buds; outside of petals accented by a delicate lighter shade. \$2.00 ea.

**SHOW GIRL** (Pat. No. 646). Deep pink on long stems; lasting and very fragrant. \$1.50 ea.

**STERLING** (Pat. No. 21). Large blooms of bright pink with touch of yellow at base of petals. \$1.25 ea.

**TEXAS CENTENNIAL** (Pat. No. 162). Light carmine, toning to dark pink with age. \$1.25 ea.

**MARY MARGARET McBRIDE** (Pat. No. 537). Clear, deep coral pink suffused with gold at base of petals. \$1.50 ea.

**FLORADORA**. Floribunda. Twenty-five petaled blooms of vivid geranium red. \$1.50 ea.

**PINOCCHIO** (Pat. No. 484). Winsome buds of rich salmon, flushed with gold changing to soft clear pink. \$1.25 ea.



PINOCCHIO (Plant Pat. No. 484)

## OLD ESTABLISHED FAVORITES

\$1.10 Each; \$11.00 per Dozen

**CHRISTOPHER STONE**—Crimson.  
**ETOILLE DE HOLLANDE**—Bright red.  
**POINSETTIA**—Glowing scarlet.  
**DAINTY BESS**—Single shell pink.  
**PICTURE**—Velvety rose pink.  
**PINK DAWN**—Rose pink.  
**THE DOCTOR**—Vigorous satiny pink.  
**GOLDEN DAWN**—Lemon yellow.  
**JOANNA HILL**—Pale yellow.  
**McGREDY'S YELLOW**—Bright yellow.  
**SISTER THERESE**—Daffodil yellow.  
**AUTUMN**—Burnt orange.  
**CONDESSA DeSASTOGA**—Copper and gold.  
**MRS. SAM McGREDY**—Coppery-orange.  
**PRES. HOOVER**—Shades of pink and yellow.  
**TALISMAN**—Blends of gold and apricot.  
**FRAU KARL DRUSKI**—Snowy white.  
**McGREDY'S IVORY**—Creamy white.  
**CECIL BRUNNER**—Small shell pink.  
**ELSE POULSTEN**—Small rose pink.

### (CLIMBERS)

**BLAZE** (Pat. No. 10) — Brilliant scarlet.  
\$1.50.  
**KING MIDAS** (Pat. No. 586) — Bright gold.  
\$1.50.  
**MME. STAECHELIN**—Pink.  
**MRS. E. P. THOM**—Yellow.  
**PAULS SCARLET**—Bright red.  
**PRES. HOOVER**—Orange and gold.  
**REVEIL DIJONNAIS**—Pink and gold.  
**TALISMAN**—Salmon.

TALISMAN



CL. PAUL'S SCARLET

# FLOWERING BULBS

## DAHLIAS

COUNTESS OF PEMBROKE (D). Large lavender.  
DARLENE (D). Shell pink.  
DOAZON (or BIGGUS) (D). Giant orange scarlet.  
MINA BURGLE (D). Popular red.  
PURITY (D). Snow white.  
YELLOW COLOSSE (D). Bright yellow.  
ETENARD DELYON (C). Lavender.  
GLADYS SHERWOOD (C). White.  
SCARAMOUCHE (C). Large Indian red.  
CARDINAL (P). Bright red.  
GOLDEN QUEEN (P). Deep yellow.  
PHYLLIS (P). Purple  
DEE DEE (P). Lavender.  
(D) Dahlia Flowered, (C) Cactus, (P) Pon Pon.

Above Varieties, 30c Ea., 6 for \$1.50



DAHLIA

JERSEY'S MAMMOTH (D). Large red and yellow.  
NANAQUAKET (D). Large pink.  
SILVER SHEEN (D). Lavender.  
SNOWDRIFT (D). Large white.  
THE COMMODORE (D). Huge canary yellow.  
W. H. T. (D). Old rose.  
EDNA FERBER (C). Coral and gold.  
JERSEY'S MELODY (C). Pink.  
STAR OF BETHLEHEM (C). White.  
CLARA CARDER (D). Large cyclamen pink.  
FOREST FIRE (D). Yellow and red.  
JANE COWL (D). Buff and salmon.  
JOSEPHINE F. (D). Pink.  
KEMPS WHITE WONDER (D). Large white.  
MRS. GEO. BOUTILLIER (D). Huge red.  
PURPLE FLUFFY RUFFLES (D). Purple.  
SAGAMORE (D). Apricot buff.

Above Varieties, 40c Ea., 6 for \$2.00  
Assorted Dahlias, our choice, 25c Ea., \$2.50 Doz.

## TIGRIDIA (Mexican Shell Flower)

Plant these gorgeous and fascinating bulbs in the spring after the danger of frost has passed to enjoy the splendor of their silken flowers in a wide range of rich colors. Price \$1.25 per dozen.

## RANUNCULUS

With their brilliant flowers of red, yellow, golden yellow, pink orange and white, these easily grown bulbs deserve a place in every garden. Plant them in well drained soil in a sunny place and mulch them with straw during the cold weather. Assorted colors, large size, 9c each, 90c a dozen.



RANUNCULUS

## ANEMONE

Wonderful companions to Ranunculus with large flowers of red, white, purple, lavender or rose, these showy bulbs are among the finest spring flowers. Use them freely in the border, rock garden or shrubbery.

In the Inland Empire these bulbs are best planted in the spring for outdoor use. For indoor bloom in the winter place the bulbs in pots and grow in a moderately cool place until growth is started, then put them in a warm, sunny room.

Assorted colors, large size  
9c Ea., 90c per Dozen



ANEMONE

# LAWN GRASS SEED

## DUTHIE LAWN MIXTURE The Best All-Purpose Lawn Seed, Lb. 80c Adapted to Northwest Lawns

Wonderful mixture resulting from years of experience. It is especially prepared by us from the highest quality seeds produced. It makes a smooth, green, velvety lawn with a thick bottom, free from common grasses which are inclined to produce clumps or knots. Only the very finest varieties of the most suitable grasses for making an even, thick mass are used in this mixture. The various grasses composing this well-balanced blend are fine-bladed and deep rooting, sure to produce the best results under our conditions of soil and climate. It is all plump, heavy seed, free from chaff or weed seeds. Sow one pound for a plot 20 by 20 ft. (400 sq. ft.); 100 to 150 lbs. of seed are required to sow one acre.

## HOW TO BUILD YOUR LAWN

In preparing a lawn a foundation is just as important as a foundation of your home, as it is something that should not have to have repairs for several years if properly constructed. In most of our lawns in the Inland Empire, the soil is usually fill-dirt from excavating your basement. The lawns can be built from this type of soil, but seldom gives satisfactory results for several years. Gravelly and coarse sandy soils should have an application of peat moss on top of the fill dirt, using one bale to each 500 square feet with at least a three-inch covering of

good black soil. The peat moss will stop the soil from washing away through the gravel and will act as a sponge to retain the moisture. Such a treatment will soon pay for itself in the annual saving of water. A lawn that is thus prepared seldom requires watering more than twice a week if this lawn is well soaked each application. If the top soil is inclined to harden, peat moss can be worked in with the soil which will act as a mulch. After the top soil has been properly spread, a lawn roller should be applied to show up the low spots. These should be filled in or levelled off and rolled again. After all those spots are out, a light raking before seeding is best. Then the seed should be applied and lightly raked the second time. Then rolled and thoroughly sprinkled, but not enough to flood. A thin layer of peat moss over the surface of the soil will help retain the moisture.

During the germination of seed, the lawn should be kept damp at all times, as one hot day with no moisture will destroy the germination of newly sprouting seeds.

Fertilizing a new lawn should be done at the time the seed is planted providing it is an all chemical fertilizer. If a chemical and organic fertilizer is used, it should be applied at least one week before seeding to allow the heat from the organic elements to work out before germination of the seed. If no fertilizer is applied at the time of seeding, or before, it should not be fertilized until after the lawn has had its first mowing.

A good method to insure even distribution of this seed over the lawn area is to divide the seed into three equal parts, taking one part and seeding north and south or east and west; the second part in the opposite direction; and the third in a criss-cross manner.

## ENQUIRE FOR PRICES ON LAWN SEEDS LISTED BELOW

**ASTORIA BENT.** This strain of Bent differs from the Seaside variety in that it does not send out stolens, but it spreads underground, sending up many rootstalks that produce a splendid turf. The growth is upright, of fine texture and is a richer green than Seaside Bent. It is more practical for lawns and succeeds best in heavy soils. Sow 1 pound to 600 square feet.

**CHEWING FESCUE.** Used extensively on putting greens, fairways and tees on golf courses, and does well on any kind of soil. It also produces a stiff, upright plant. Sow 1 pound to 400 square feet.

**KENTUCKY BLUE GRASS.** Makes an excellent lawn of dark green color. It forms a fine mat. With care and water makes one of the best lawns. Sow 1 pound to 300 square feet.

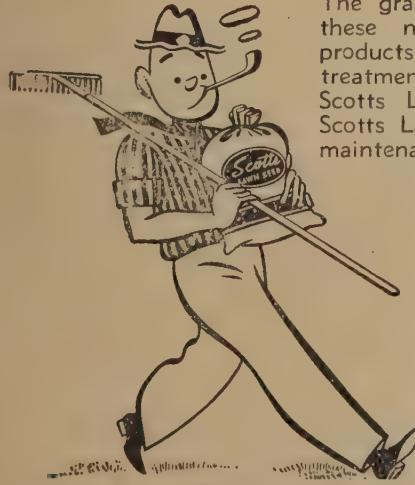
**SHADY LAWN MIXTURE.** This grass is especially adapted for growing in very shady places or near buildings where other grasses will not grow. If you have a shady, barren place, try our Shady Lawn Mixture. Sow 1 pound to 400 square feet.

**WHITE DWARF CLOVER.** Very low growing sort, principally used in poor ground to give a green color. Many like it in lawns, especially where grass does not do well. Sow 1 pound to 300 square feet.

**RED TOP.** A fine-bladed grass that succeeds on almost any soil, although it does best under moist conditions. It is used in almost all lawn mixtures. Should not be planted by itself unless specifically recommended. Sow 1 pound to 200 square feet.

**CREEPING RED FESCUE.** This is the lawn grass you'll hear much about as time goes on. Creeping Red Fescue combines the close growing qualities of Bent Grass with the dark green colors of Fescue. The grass blades are very fine texture, and the grass most sturdy and hardy. The finer lawns of the future will be planted to Creeping Red Fescue because of its enduring beauty and ruggedness. Red Fescue is not susceptible to brown patch and fungus diseases that attack Bent Grasses.

## Now Scott's Lawn Care Products Are Here!



The grass is always greener with these nationally renowned lawn products. Give your turf this beauty treatment—a nourishing meal of Scotts Lawn Food, a sowing of Scotts Lawn Seed, and follow the maintenance suggestions in free Lawn Care bulletins.

### FREE 2-year Subscription LAWN CARE

Bulletins published several times yearly. Brimful of timely hints and new ideas to help you grow a beautiful lawn. Just send mailing address for future issues.

**SCOTTS LAWN SEED.** Top quality blend choice perennial grasses that build permanent turf. For sun or light shade. 99.91% weed free. 1 lb. \$1.00, 5 lb. box \$4.95.

**SCOTTS DENSE SHADE.** Special perennial grasses for areas receiving less than half day of sunlight. 1 lb. box \$1.00, 5 lb. box \$4.95.

**SCOTTS LAWN FOOD.** Tailor-made feeding especially for lawns. Not a general fertilizer. Enough for 2500 sq. ft., \$2.45.

**SCOTTS 4-X.** Premeasured packets for spraying away broad leaved weeds without harm to grass. No. 2 box \$1.00, No. 3 box \$3.25.

**SCOTTS LAWN FOOD PLUS WEED CONTROL.** Feeds and weeds lawns in one simple operation. Enough for 2500 sq. ft., \$3.50.

Scotts Precision Spreaders for applying Lawn Food and Sowing Seed

Scotts Bentgrass Seed and Scotts Plump Lawn Clover Seed





CRESTED WHEAT GRASS

**CRESTED WHEAT GRASS.** This is the valuable plant for our Western country and thrives well in semi-arid sections. It is one of the best and surest hay grasses for these sections. It withstands drought and the cold winters. As a mixture it does fine with Brome grass. Sow 10 to 15 lbs. per acre.

**ORCHARD GRASS OR COCKSFoot** (*Dactylis glomerata*). Valuable if planted alone or mixed with other grasses. Very often mixed with White Clover, Red Clover and Rye Grass. Sow 20 to 28 lbs. per acre.

## MILLETS

**GERMAN OR GOLDEN** (*Chactochloa Italica*). Will grow on any good land and yields heavily when irrigated. Yields from 30 to 40 bushels of seed per acre, and is excellent food for stock and poultry. Also a good green fodder and hay plant.

**HOG OR PUOSO.** The seed is large. Feeding value almost equal to corn. It is a valuable feed for hogs and cattle as well as for birds and poultry.

## FIELD PEAS

**AUSTRIAN WINTER PEAS.** Here is the ideal forage legume for hay, ensilage or for pasture. The vines and pods are almost as large and heavy as garden peas. The vines are relished by all kinds of stock. Plant in the fall for best results. Will not winter-kill. Does well under irrigation and in relatively humid sections. Sow 30 to 35 lbs. per acre.

**FIRST & BEST.** This legume has the distinct advantage of being suited to late planting. May be used for summer green manure crop. Requires considerable moisture. Sow 120 to 150 lbs. per acre.

## CERTIFIED SEED POTATOES

WRITE FOR QUANTITY PRICES

Our **SEED POTATOES** are the very finest stock. Only high yielding hills and selected tubers are used in production of this Supreme Quality seed stock.

**IRISH COBBLER.** Splendid creamy white potato for early market. Large, round, sometimes slightly netted. Will bake dry and mealy, even before ripe. Extra early.

Price, 10 lbs. 85c. Larger Quantities on Request

**NETTED GEMS.** Russett Burbank, Yakima Gem, Idaho Russet, etc. A splendid main crop late potato that gives good results in dry sections. Flesh white; eyes are flush with surface; good keeper and produces a fine yield. Tubers are elongated, medium sized with russett skin. This is the variety grown extensively by irrigation in Washington and Idaho for baking. Our stock is extra choice of the most improved type.

Price, 10 lbs. 85c. Larger Quantities on Request

## VETCH

Sow 40 to 60 lbs. per acre

**COMMON VETCH.** Resembles peas and valuable for forage and green manure. As a hay crop it is generally sown with oats or wheat to afford support for the vines. Usually sown in the fall. Best adapted to sections west of Cascade mountains.

**HAIRY VETCH** (*Vicia Villosa*). Thrives on sandy soils that may be somewhat low in fertility, and makes a better growth during the cold season than the other varieties. Has very wide adaptability.

## RAPE

**DWARF ESSEX.** This crop is very highly recommended for pasture for sheep, cattle and hogs. It also makes splendid green feed for poultry. Plant in early spring. Requires fertile, moist soil. Sow 10 lbs. per acre.

## SOYBEANS

**SOYBEANS** are annual legumes widely adapted to various soils. Soybeans hay is one of the best roughages and when mixed with corn they make splendid ensilage. When harvested for seed, they should not be cut until pods are fully matured and the beans hard. Sow 25 lbs. per acre.

## SUNFLOWER

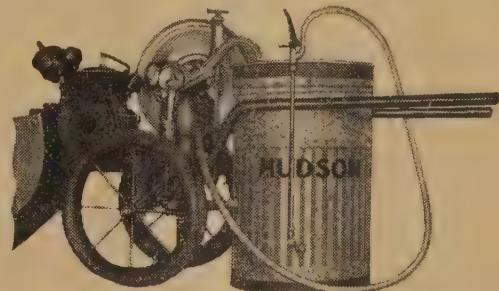
**MAMMOTH RUSSIAN.** Heavy producer of forage and seed. Of value for silage and seed production. Plant 10 lbs. per acre.

## HUDSON POWER SPRAYER

THE HUDSON "DEFENDER" SPRAYER develops 200 pounds working pressure through its 1½-horsepower gasoline engine. It provides an ideal power-operated portable unit for greenhouses, nurseries, golf courses, private estates, small orchards, truck gardens, etc. Can also be used in dairy barns, poultry houses, cattle pens, etc. Adapted for commercial and industrial uses as well.

Shipping wt. 165 lbs.  
Equipped with 10 ft. high - pressure hose, 2-foot extension. Perfection automatic shut-off, angle spray nozzle adjustable for any spray.

\$177.50,  
Spokane



**KATAHDIN.** Originated in Maine by the U. S. Dept. of Agriculture. Is slightly oval, white, very smooth with shallow eyes. Medium early, maturing a little later than Chippewa. Unsurpassed in cooking and eating qualities.

**BLISS TRIUMPH.** Recognized as one of the very earliest varieties. Is also a good keeper. Very productive. Tubers round, pink skin, flesh very white and of excellent flavor.

Price, 10 lbs. 85c. Larger Quantities on Request

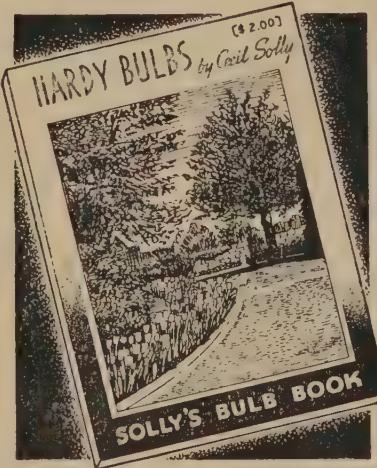
**CHIPPEWA** (Limited Supply). Earlier than Katahdin and especially well adapted for the Northwest. Matures a few days later than Cobblers and yields a consistently high percentage of No. 1 smooth, shallow-eyed tubers. An excellent cooker and very good storage potato.

# A CONDENSED LIST OF PLANTS — Postage Extra

	Each	12	50	100	1000
CABBAGE, Early and Late Varieties, transplanted.....	...	.35	1.25	2.25	17.50
CABBAGE, Early and Late Varieties, field grown.....	...	.25	.60	1.00	7.50
CAULIFLOWER, Early, Transplanted .....	...	.40	1.35	2.65	20.00
CAULIFLOWER, Early, Field grown .....	...	.30	.85	1.50	10.00
CELERY, Utah and Golden Self Blanching, Transplanted	...	.35	1.25	2.25	17.50
TOMATOES, All Varieties, Transplanted.....	...	.40	1.35	2.65	20.00
EGG PLANT, Transplanted .....	...	.40	1.35	2.65	20.00
PEPPERS, All Varieties, Transplanted.....	...	.40	1.35	2.65	20.00
LETTUCE, New York, Transplanted.....	...	.35	1.25	2.25	17.50
SWEET POTATOES .....	...	.35	1.25	2.00	12.00
ASPARAGUS ROOTS, 2 years, Martha Washington.....	...	.50	1.50	2.50	20.00
RHUBARB ROOTS, 2 years, Victoria .....	.25	2.50	...	...	...
STRAWBERRIES, Everbearing, Gem .....	...	.50	1.75	3.00	25.00
STRAWBERRIES, Standard, Dorsett, Marshall, Fairfax .....	...	...	1.35	2.50	20.00
	Each	10	50	100	1000
RASPBERRIES, Red, Wash., Taylor, Newburgh.....	.15	1.25	5.00	9.00	...
RASPBERRIES, Everbearing, Indian Summer.....	.20	1.50	5.50	10.00	...
RASPBERRIES, Black, Gregg or Cumberland.....	.25	2.00	8.00	15.00	...
LOGANBERRY .....	.25	2.00	8.00	15.00	...
BLACKBERRY, Mersereau, Snyder.....	.25	2.00	7.50	15.00	...
DEWBERRY, Lucretia .....	.25	2.00	7.50	15.00	...
YOUNGBERRY .....	.30	2.50	...	...	...
BOYSENBERRIES, Thornless .....	.30	2.50	...	...	...
GRAPES, Concord, Moore's Early, Agawam, Niagara, Freedonia, Campbell Early.....	...	.50	4.00	...	...

NOTICE—All prices F.O.B. Lewiston, or Spokane. Add postage at zone rate, or we will ship by express.  
Add Sales Tax in Washington.

## SOLLY'S HARDY BULB BOOK



This book contains full directions for the culture of all SPRING FLOWERING BULBS. It is written expressly for the home gardeners who want to have a year-after-year display of fine bulb-flowers. Complete with many illustrations, diagrams and plenty of colored pictures of the inexpensive lovely sorts.  
PRICE, \$2.00

## GROWING VEGETABLES

New revised edition of Mr. Cecil Solly's popular book. Contains 144 pages of practical information on gardening. How to grow, sorts to use, control of pests and diseases, hot-beds, cold frames, use of land and other vital sub-

jects for the amateur. Well illustrated. \$1.00.

## SOLLY'S GARDEN NOTE BOOKS

- No. 1. LAWN—How to plant and care for a lawn of perfect turf here..... 25c
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- No. 3. FRUIT TREES—How to plant and care for fruit trees in any garden. Lists best varieties .....
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## MOON SIGN BOOK



FOR YOUR GARDEN AND YOURSELF

Customers recommend this Popular Daily Guide as the best book on this subject—Get in Harmony with Nature—it pays! A mine of helpful information.

In addition to much other interesting matter it gives best dates for Farming, Gardening, Planting, Fishing, Poultry Raising, Business and Personal Affairs, etc., according to the correct Moon Sign. Sold on the publisher's unconditional guarantee, money back if not satisfied. 256 pages. Always the same price, \$1.10 in the U. S. A.

## ORDERING SUGGESTIONS

Free Transportation on All Flower and Vegetable Seeds in Packets, Ounces or  $\frac{1}{4}$  Pounds

All seeds quoted in this catalog are shipped by Parcel Post, all transportation and packing charges paid by us. C.O.D. and money order return fees are not considered as transportation charges and, therefore, must be paid for by the customer. Avoid them by sending remittances with order. Bulk seeds, such as Peas, Beans and Corn, in quantities, are shipped to your nearest express or freight office, transportation collect. If you wish them shipped by Parcel Post, please send necessary postage.

**SHIPPING ORDERS.** When goods are to be shipped by Freight or Express, give plain shipping directions; otherwise we use our best judgment in routing. Goods on which we pay transportation are shipped at our option.

**SEND MONEY.** Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods: (1st and best) Post Office Order; (2nd) Bank Draft; (3rd) Express Company Money Order; (4th) Cash by Express in amounts not less than \$50; (5th) Registered Letters.

**WE GUARANTEE** the safe arrival of your order.

We wish it understood that all our stocks are sold under the following conditions: We give no warranty, express or implied, as to the productivity of any seeds, bulbs or plants we sell; nor do we warrant fertilizers other than in respect to data required of the seller by statutes. It is expressly agreed that the limit of liability for all claims for loss or damage due to any cause shall be in a sum no greater than the invoice price of the goods and in no case shall we be responsible for loss or damage of the crop.

# Protect your beautiful garden...

Check your needs for these  
**ORTHO** pest control products



## TWO GREAT NEW PRODUCTS

### BOTANO Deluxe

Improved: contains Zinc and Iron Carbamates, Gamma Isomer of Benzene Hexachloride, Dianysyl Trichloroethane.

8-oz. Duster, 75¢ 2-lb., \$1.50

### VAPOTONE Spray

Kills Red Spider, Aphis—for Greenhouse use.

47/100 gal. .... \$7.90  
95/100 gal. .... \$11.90

## MULTI-PURPOSE SPRAY

**ORTHO** Garden Spray Set. For use against more prevalent Garden Insects.

Set contains 4-ounce bottle of EXTRAX Insect Spray, GREENOL Liquid Fungicide and VOLCK Oil Spray. Makes 25 gallons Multi-Purpose Spray. .... \$1.85

**ORTHO** Garden Spray Set, JR. 2-oz. bottles of EXTRAX, GREENOL, VOLCK. .... \$1.20

## MULTI-PURPOSE DUST

**BOTANO** Garden Dust. For use against many insects and diseases. One of the safest multi-purpose dusts that can be used. 10-oz. size also serves as handy garden duster. Includes Rotenone and Pyrethrum.

10-oz. Duster ..... 60¢

## MULTI-PURPOSE BAIT

**PJG-GETA** PELLETS. For use against Principal Foraging Pests.

Slugs, Snails, Cutworms, Earwigs, Grasshoppers, Strawberry Root Weevil. Baiting against these pests is easy with the new BUG-GETA PELLETS Compressed BAITS. 5000 baits in a 2-pound carton.

12-oz. Crtn, 35¢; 2-lb. Crtn, 75¢  
5-lb. Crtn, \$1.50; 25-lb. Bag, \$5.60

**APPO** Cutworm Bait. A new poisoned Apple bait. Kills Cutworms, Strawberry Root Weevil; also Vegetable Weevil, Slugs, Snails. .... 1-lb. Carton, 45¢

**CALTOX** Garden Dust "525". Especially useful on Tomatoes, Potatoes, Cucumbers, Squash and Melons. Contains Cryolite, Copper and Zinc. 10-oz. Dual Purpose Package. .... 60¢

**VOLCK** Oil Spray. Envelops, wets and smothers many sucking insects. Also spray carrier for other sprays. 4-oz. Bottle, 35¢ 1-Pint Bottle, 70¢  
1-Gallon Can ..... \$2.85

**ORTHOL** Garden Spray. (Garden VOLCK with DDT.) Kills Aphis, Thrips, Mealybugs and many other insects. 4-oz. Bottle, 35¢ 16-oz. Bottle, 75¢

**ORTHO** Sowbug Killer. A specially prepared bait for use against Sowbugs and Pillbugs. .... 1-lb. Can, 50¢

**ORTHO** Ant and Roach Powder. A Fluorine-Pyrethrum Insecticide for use against Ants, Roaches, Silverfish. Easy to use. .... 4½-oz. Shaker, 25¢

**ANT-B-GON** Ant Poison. Four to eight Dispensers are enough for average home. Easy to refill. Ants feed from "WICK".... can't get inside. For Argentine and Sweets-eating ants. Set of four 1-oz. Dispensers. .... 70¢  
Ant poison to refill dispensers:  
4-oz. Bottle, 25¢ 1 Pint, 60¢

**EXTRAX** Insect Spray. Contains Rotenone and Pyrethrum. Kills by contact insects such as Aphis, Beetles, Caterpillars, Thrips.

4-oz. Bottle, \$1.00 1 Pint, \$2.85  
½ Gallon ..... \$9.25

## THREE NEW DDT INSECTICIDES

**PEST-B-GON** Insect Spray. Contains 20% DDT. Kills Beetles, Worms, Thrips, Ants, Leafhoppers; also Houseflies (as screen paint), Mosquitoes, Fleas. 4-oz. Bottle, 65¢ 1 Pint, \$2.00

**PEST-B-GON** Insect Dust. Contains 10% DDT. Kills many Thrips, Plant Bugs, Beetles, Worms, Leafhoppers—Fleas, Bedbugs, Roaches, Silverfish, Ants.  
10-oz. Duster Package. .... 69¢  
2-lb. Package ..... \$1.00

**PEST-B-GON** Wettable. Wettable DDT Powder. .... 1 lb., \$1.00

**ORTHO** Lead Arsenate. A stomach poison for use as a spray or dust. 1 lb., 50¢

**GREENOL** Liquid Fungicide. A copper fungicide used to prevent Powdery Mildew. .... 1 Pint, \$1.50  
4-oz. Bottle, 60¢ ½ Gallon, \$5.00

**ORTHO** "BORDO" Mixture. Prepared Bordeaux Mixture. .... 1 lb., 40¢

**FLOTOX** Garden Sulfur. Finely powdered. Use as a dust or spray. .... 26 ozs., 35¢

**CONTAX** Sealing Compound. Protect cuts and tree wounds. Also has many other uses. .... 1 Gallon Can, \$1.50

**ORTHO** Rose Spray Kit. Special Combination Offer. Contains 2-oz. bottle "EXTRAX" for Aphis and other insects and 2-oz. bottle "GREENOL" to prevent certain Powdery Mildews. Makes 12 gallons spray. Used for vegetables, too. .... Each Kit, \$1.00

**ORTHO** Rose Dust. Complete rose and flower garden dust.  
8 oz., \$1.00 1 lb., \$1.25

**ORTHO** Soil Fumigant. To control Cabbage and Onion Maggot, Sod Webworm. 4-oz. Bottle, 35¢ 1 Pint, \$1.00

**TRIOX**. Poisons soil and prevents weeds from growing. Use on driveways, walks, and other places where no vegetation is wanted.

1-Qt. Can, \$1.00 1-Gal. Can, \$3.50

**WEED-B-GON** Weed Killer. Contains 2,4-D. A hormone spray for killing Wild Morning-Glory (Bindweed), Poison Oak, Poison Ivy, Plaintain, Dandelion. Use on grass lawns (not Dichondra, Lippia or Clover). 4-oz. Bottle, 50¢ 1 Pint, \$1.50

**ORTHO** Rat Bait Pellets. Ready-to-use Red Squill Baits. Poisoned Rats seek underground burrows before dying. 2-oz. Carton, 25¢ 6-oz. Carton, 45¢

**SCRAM** Dog Repellent. A special powder used to keep dogs away from shrubs, flowers, lawns, store fronts, porches, etc. Easy to use. Does not harm animals. .... 8-oz. Shaker, 50¢

**ORTHO-PET** Flea Powder. 1½-oz. Puffer Package. .... 35¢



CALIFORNIA SPRAY-CHEMICAL CORP.

Richmond, California Elizabeth, New Jersey

# INSECTICIDES—FUNGICIDES WEED KILLERS



**BIRDS-OFF**—Keeps birds from strawberries, cherries, etc.

2 lb. 70c; 5 lb. \$1.65

**DOWFUME**—New soil fumigant for use on wireworms and all soil insects. Can plant 30 days after. 1 gal. \$3.50; 10 gals. \$21.50

**EVERGREEN SPRAY**—For aphids, etc. Highly concentrated pyrethrum spray. One ounce makes 6 gals. of spray. 1 oz. 35c; 6 oz. \$1.15



**CYANOGAS** (A Dust)—Kills moles, rats, mice, yellow jackets, ants, etc.

Ant size, 39c; 1 lb. 98c; 5 lbs. \$3.75; 25 lbs. \$12.50

**FISH OIL SOAP**—Used as spray or with other insecticides as a spreader.

1 lb. 20c; 5 lb. 90c

**PARIS GREEN**—For chewing insects on potatoes, etc. 1/4 lb. 25c; 5 lb. \$2.00.

**NAPHTHALENE FLAKES**—Used for repelling insects. 26 oz. 35c; 5 lb. 75c.

**CHAPERONE**—Dog repellent. Keeps dogs away from porches, shrubs and garbage pails.

4 oz. 60c; 12 oz. \$1.25

**TRIOX**—A highly effective soil sterilant for control of weeds in drives, tennis courts, etc.

1 qt. \$1.00; 1 gal. \$3.00

**BUHACH POWDER**—A pyrethrum powder for the control of ants, flies, roaches, moths, etc. 1 1/2 oz. 25c; 3 3/4 oz. 50c.

**TREE TANGLEFOOT**—A tree banding substance to prevent ants and other insects from climbing trees. 1 lb. 75c.



**AMMATE**—Kills permanently such weeds as wild roses, sumac, poison ivy, etc. Non-poisonous and non-inflammable.

2 lb. 95c; 6 lb. \$2.55; 50 lb. \$12.00

**APPO CUTWORM BAIT**—Used to control cutworms and strawberry root weevil. 1 lb. 35c.

**VAPOTONE**—One of the new insecticides; for the control of red spider. 1/2 gal. makes 400 gals. of spray. 1/2 gal. \$7.90.

**EARWIG BAIT**—A fish oil and bran product to control earwigs. 1 lb. 75c.

**SNAROL**—A bait to combat snails, slugs, cutworms and grasshoppers. 1 lb. 35c; 2 1/2 lb. 75c.

**SULPHUR**—For mildew, red spider. 1 lb. 15c; 4 lb. 50c.

## WEEDONE

The Sensational  
Internal  
Weed Killer  
REG. U. S. PAT. OFF.

Kills Poison Ivy, Poison Oak, Bindweed, Honeysuckle, Dandelion, Plantain, other noxious weeds. Sprayed on leaves, it travels down and kills right out to the root tips. Sprayed on lawns, it kills lawn weeds without hurting the grass. Safe for humans and animals. Weedone does not hurt the soil or spraying equipment. Just mix with water and spray.

6-oz. can	75c
(covers 1,000 sq. ft.)	
1-qt. can	\$2.50
(covers 5,000 sq. ft.)	
1-gal. can	\$7.50
(covers 1/2 acre)	

Larger quantities  
on request.

## RODENT DESTROYERS

**1 RAT LUNCHES** Rats dine then die when they eat RAT LUNCHES! The old reliable! Safe to use anywhere in the Home, Factory, Mill, Warehouse, Poultry House, etc. 25c and 50c size. Guaranteed effective. Kills rats only.

**2 DEATH TO MICE** Guaranteed to destroy all mice. More convenient than traps or other preparations. Unattractive to dogs, cats, or other pets but SURE DEATH to MICE! 25c and 75c size.

**3 DEATH TO GOPHERS** Kills gophers, prairie dogs, squirrels, groundhogs and other rodents. Over 30 years of success. Consists of blend of foods which rodents seek in which poison is concealed. Rodents eat it then die! Big market among golf and country clubs, park and cemetery associations, fruit growers, etc. 25c, 50c and \$1.00 sizes.

**4 DEATH TO MOLES** Guaranteed to kill moles. Enjoys record of over 30 years success to users everywhere. Can you ask for better? 25c size.

**RAT LUNCHES CO., INC., CARROLL, IOWA**



**ORTHO RODENT DESTROYER**—Kills gophers, squirrels, rats, mice, etc. A grain type bait with strichnine. 6 oz. 35c; 1 lb. 60c.

**RAT NIP**—A phosphorous type bait. Very effective. 35c Jar.



**BLACK LEAF 40**—A solution of nicotine sulphate containing 40% nicotine. For aphis, red spider, etc. Also for chicken lice.

1 oz. 35c; 5 oz. \$1.05; 1 lb. \$2.45



**TAT FORMULA 83** Contains Antu, the new toxic agent discovered during the war.

Easy to use — Very effective.

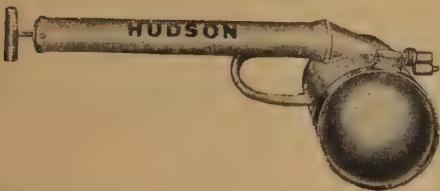
Two sizes: 35c and \$1.00.

# HUDSON SPRAYERS

## HUDSON 210-G "PERFECTION" SPRAYER

Easy fill, open top makes for ease in filling and cleaning. Hudson engineers have perfected the open-mouthed principle of compressed air sprayers to the point where "Perfection" is the last word in tank sprayers. When the pump and top assembly is locked in position on the "Perfection", it is there to stay. So is the pressure in the inside of the tank. Four points of contact insure a positive seal. Equipped with an ingenious eccentric type lock to provide quick, secure locking, or safe, easy release. Made either in galvanized or copper. Shipping weight 13 pounds. Four gal. capacity.

210-G—Galvanized tank ..... \$13.50



**No. 435 CARDINAL SPRAYER.** Is particularly effective for handling fly sprays in the dairy barn, milk house, creamery, etc. Excellent as a poultry-house sprayer. Continuous, 3-quart "Nu-action" pump. Heavy galvanized steel tank of 3-quart capacity. Adjustable nozzle adapts this sprayer for all classes of work and densities of solution. Weight 5 pounds. \$2.45.



**No. 661 SIGNAL DUSTER.** A practical small duster for the small gardener.  $1\frac{1}{4}$  in. diameter, 3 in. length. Large, easily removed filler cap. Air valve prevents powder from getting back into pump. Discharge tube facilitates driving the powder into cracks and crevices. Weight 1 lb. 55c each.

## GARDEN HOSE SPRAY GUNS

### THE Hayes Jr. The All-Purpose Spray Gun

Full 3 GALLON capacity sprayer, yet easily held in one hand. Replaces heavy expensive spraying equipment. Just attach the Hayes Jr. to your garden hose, press the lever and SPRAY! Sprays up, down, sideways. For spraying vegetable and flower gardens, trees, etc., with liquid or powder insecticides.



ONLY \$6.95



### Ideal Weed Killer Gun (2-4-D)

1 1/2 GALLON sprayer for small gardens, etc. Ideal sprayer to apply the new 2-4-D weed killer solutions. Weighs only a little over a pound filled. Nozzle adjusts to spray up, down, sideways—with all liquid spray materials free from soap.

\$3.45 ONLY

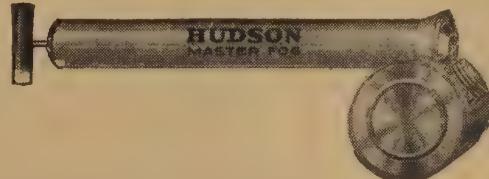
## HUDSON CLIMAX SPRAYER No. 235-G

Open top galvanized steel tank.  $3\frac{1}{2}$  gallon capacity.  $7\frac{1}{4}$  x 21 inches; 24-inch high pressure spray hose. Perfection automatic shut-off valve locks for continuous spraying. 2-foot extension rod with angle spray nozzle. Has high pressure and ample capacity for all classes of spray work. Can be used with any agricultural insecticide, whitewash, etc. Embodies strength, safety (tested to 100 pounds pressure), ease of operation and accessibility.

\$10.90 each



**No. 766 ADMIRAL DUSTER.** The Admiral duster will efficiently apply any powder-insecticide. Volume of discharge ranges from a very fine to a heavy cloud. Uniform mixture of carrier and concentrate through the entire application. Economical application adapts it for higher priced powder-insecticides such as Rotenone, Derris Root, Pyrethrum, etc. Special plunger provides powerful air-blast which drives through powder agitating it thoroughly. Arrow indicates path of air current. Sturdily built,  $2\frac{3}{4}$  in. diameter,  $9\frac{1}{2}$ -in. stroke. Threaded cap makes plunger accessible or removable. Powder reservoir  $2\frac{3}{4}$  x 6 inches. Large filler screw cap permits easy fill or cleaning. 24-in. extension tube with adjustable nozzle for straight or angle discharge. Weight 8 lbs. \$1.80.



**No. 303**  
**NO. 303 FOG SPRAYER** handles all fly oils and insecticides and does not permit any liquid to drop on rug, chair, etc. The capacity is about 1 pint. Shipping weight 2 lbs. Price each, 60c.



**THE ARNOLD GARDEN HOSE SPRAYER** is a device that attaches to the garden hose in place of the regular nozzle. It consists of a shut-off, chamber for cartridges, extension and adjustable nozzle that will spray from 8 to 25 feet.

Arnold Sprayer ..... \$5.50  
Cartridges ..... 35c each; 3 for \$1.00

DDT FOR CHEWING INSECTS  
P-R FOR SUCKING INSECTS  
FUNGUS SPRAY FOR PLANT DISEASES

### THE Hayes HAN-D Revolutionary Hand Sprayer

1 quart capacity. For home, farm and garden use. Sprays all liquid insecticides and properly strained powders such as Bordeaux, Lime Sulphur and Lead Arsenate. Ideal for applying the new DDT in and around chicken houses, rabbit hutches, and dairy barns.

ONLY  
\$2.95





## BRING APRIL SHOWERS TO YOUR GARDEN ANY TIME OF THE YEAR WITH "NATURAIN"

### EASY TO USE

Connected with a twist of the wrist. Five-foot length weighs only 12 ounces. No constant shifting of spray.

### SAVES TIME

NATURAIN does your watering job in a matter of minutes, not hours.

### THE SCIENTIFIC METHOD OF WATERING

Universally chosen by nurserymen and professional growers after years of study.

### COMPLETELY ADJUSTABLE

DIRECT WATER WHERE YOU WANT IT. STAYS ON LAWN—NOT ON SIDEWALK.

NATURAIN Units are 5 ft. long

PRIMARY UNIT  
\$2.95

SECONDARY UNITS  
\$2.49 Each

### ADAPTABLE TO ALL NEEDS

Use 5 ft. to 30 ft., depending on size of your lot. NATURAIN gives over 20 ft. spread of water even in 20 ft. lengths with modern home water pressure.

### PERFECT FOR FLOWER BEDS AND VEGETABLES

Spray can be cut down to a gentle trickle for use on most fragile plants without harm.

### BUILT FOR YEARS OF SERVICE

Made of durable aluminum and stainless steel. NO MOVING PARTS TO WEAR OUT.

### REDUCE WATER BILLS

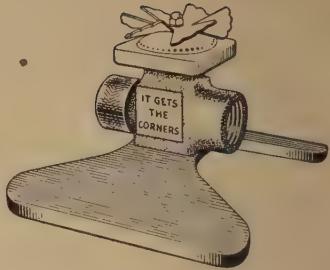
Puts water where you want it.

## CARROLL SQUARE SPRAY

### "It Gets the Corners"

These truly efficient sprinklers guarantee an even distribution of water over an area two to thirty feet square. Other units may be connected, making a complete sprinkler system.

\$2.75 Each

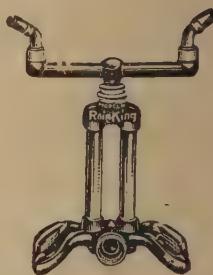


The Bradson Adjustable Sprinkler System consists of three fully adjustable sprinkler heads that can be quickly and easily installed on any rubber hose without cutting or couplings. You can attach it yourself. No special fittings are required . . . no special tools needed. No trenches to dig . . . no pipes to lay.

Anyone can install a Bradson Sprinkler System on their hose in a few minutes using only a screw driver. Set consists of three heads; however, additional heads can be used if water pressure is adequate.

## Rain King

*The BEST SPRINKLERS MADE*



### RAIN KING SPRINKLER MODEL H

Chrome plated. Adjustable for coarse or medium shower. Can be used for revolving or stationary sprinkling by simply turning lock wheel. 11 1/4 in. tall; 9 1/4 in. from nozzle to nozzle. Price each, \$5.25. Shipping weight, 5 lbs. each.



### RAIN KING SPRINKLER MODEL K

Automatic, new, sensational sprinkler that you can set instantly to sprinkle any size circle 5 to 50 ft. by simply turning the button on top of the sprinkler. Price each, \$6.75. Shipping weight, 5 lbs. each.

### RAIN KING ADJUSTABLE HOSE NOZZLE

Can be adjusted from fine spray to stream.

Price each, \$1.00; postpaid, \$1.10



## THE Hayes Sprinkl-Air

### Amazing New AIR-Water Nozzle!



ONLY 69¢

Mixes AIR into the water flowing through garden hose! Magically changes harsh spray into soft, lacy, beneficial RAIN that falls lightly onto newly seeded lawns and gardens. Protects tender seedlings and tiny plants—won't wash away seeds or earth.

THE IDEAL MATE FOR...

## THE Hayes 10 to 1 Proportioner

The new Liquid Fertilizers give rapid results in greener, more beautiful lawns. Apply them the "easy way"—through the garden hose while sprinkling, with the Hayes 10-1 proportioner.

ONLY  
\$1.95



COMB. PKG.—NOZZLE & PROPORTIONER \$2.55

### GOODYEAR GARDEN HOSE

For the first time since the war we are able to offer this superior quality hose.

**Emerald Cord**—Top grade 2-ply, 5/8", light weight, green. \$15.45 per 50 ft.

**Wingfoot**—A high quality single ply, 5/8". Won't kink, snarl, or snake, autumn brown. \$9.70 per 50 ft.

**Pathfinder**—Good grade, 5/8" single ply hose. Strong and flexible. Black. \$7.10 per 50 ft.

Miller's

GARDEN

## COMPOST MAKER



5 lb. pkg. . \$ .86  
25 lb. pkg. . 2.85

A 5-pound package of *Miller's Garden COMPOST Maker* will make several hundred pounds of high-grade organic humus fertilizer by converting garden and kitchen refuse, weeds, leaves, and grass clippings, into a rich organic humus compost.

## GARDEN BOOSTER POWDER



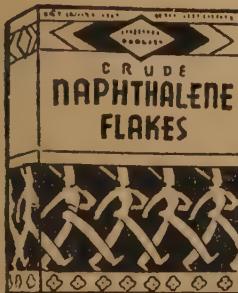
Make your own Booster Fertilizer Solution as low as 1c a gallon with *Miller's Garden BOOSTER Powder*. Stimulates Plant Growth, Root Formation, Fruit Setting, Flower Production. Produces vegetables rich in flavor and minerals essential to your Health.

4 oz. pkg. . \$ .25  
1 lb. pkg. . 50  
5 lb. pkg. . 1.50

## MORE TOMATOES and more SEEDLESS tomatoes WITH FRUITONE

25c pkt. makes 5 gal.  
\$1 pkg. makes 25 gal.

This plant hormone spray will help develop a better set and a bigger crop of tomatoes. If the spray hits the blossoms *after* blooming and *before* pollination, the tomatoes will be seedless. Simple and easy to use, *Fruitone* also helps grow big berries on berry-bearing shrubs and stops pre-harvest drop on fruit trees.



1½ pounds ..... \$ .35  
5 pounds ..... .75  
Postage paid.

## KILLS SOIL PESTS

Diamond Quality Naphthalene Flakes are now used extensively throughout the west for the control of many soil pests. This material is highly recommended by the U. S. Department of Agriculture for the control of Wireworms. One pound of material thoroughly worked into 50 square feet of ground will give from 97 to 100% kill.

Get your supply early and work it into the ground before planting your Victory Garden.

Diamond Quality Naphthalene Flakes is also recommended for the control of Gladiolus Thrip. One ounce of flakes to every 100 bulbs, placed in a paper sack right after digging.

NAPHTHALENE KILLS ROOT MAGGOTS

Miller's

GARDEN

## SPRADUSTO



Insecticide — Fungicide  
SPRAY or DUST

Flower Gardens, Shrubs, Ornamentals

Used regularly controls Powdery Mildew, Black Spot, Rusts, Aphis, Leaf Hoppers, Beetles, Caterpillars.

Effective — Safe to Use.  
Contains 5% DDT, Rotenone, Pyrethrum, Sulphur, Fermate.

8 oz. pkg. . \$1.00  
1 lb. pkg. . 1.25  
5 lb. pkg. . 5.25

## GARDEN RODUSTO



Insecticide — Fungicide  
DUST or SPRAY  
Vegetable Gardens

Safe to use right up to harvest.

Controls: Aphis, Flea Beetles, Caterpillars, Powdery Mildew.

Contains: Rotenone 1%, Pyrethrum, Sulphur, Copper.

8 oz. pkg. . \$ .90  
1 lb. pkg. . 1.10  
5 lb. pkg. . 4.25



## ROOTONE

Reg. U. S. Pat. Off.



Geranium Cuttings. Treated and Untreated

ROOTONE, the plant hormone powder. Dip cuttings in Rootone before planting to give faster, better, more successful rooting. Mix flower, vegetable or grass seed with Rootone before planting to give faster growth and stronger roots. Easy to use. ¼ oz. packet 25c. 2 oz. jar \$1.00. 1 lb. can \$5.00.

## WHICH DO YOU WANT?



THIS



OR

THIS

The hormones and vitamins (B, and others) found together only in

## TRANSPLANTONE

THE HORMONE-VITAMIN POWDER

Stop the shock and wilt usually inevitable after transplanting all kinds of plants. . . . Simple, Safe, Economical to use. ½ oz. packet 25c, 1 oz. can 50c, 3 oz. can \$1.00, 1 lb. can \$4.00.

# ***GARDEX "Soil - Flow" GARDEN TOOLS***



No. 1635

**No. 1635 7-in-1 Diamond Point CULTIVATOR.** The easiest and most efficient working cultivator, designed for light and heavy soils. Easily adjustable without wrenches to make 7 useful combinations. **\$2.20.**



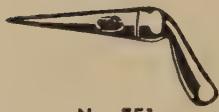
No. 4107

**No. 4107 GARDEX SCUFFLE HOE.** Push type hoe for cutting weeds in walks, drives and garden. 7-inch blade. **\$1.35.**



No. 214-8

**No. 241-8 SOIL PULVERIZER.** Ideal tool for preparing the seed bed, lawns, etc. Rotating teeth thoroughly break up soil to desired depth. For mulching, working in compost, etc. Quick and efficient to use. **\$3.25.**



No. 751

**No. 751 GARDEX DIBBLE.** For garden or field. Light hollow steel; lower half polished. **85c.**



No. 121

**No. 121 SINGLE BOW-PULL HOE.** For close work. Light weight, well balanced. Blade replaceable.

**121-5 Width of blade 5" \$1.10**

**121-7 Width of blade 7" \$1.35**



No. 703

**No. 703 MIDGET FORK.** Three forged prongs. Handy for light planting of house plants and others. **35c.**

**New Handy Plant Tie**  
**A Twist of the Wrist and Plant is Tied**

Strong, dark green "invisible" tapes with wire reinforcing. TWIST-EMS' protect stems, permanently support annuals, perennials, vines, shrubs, vegetables.

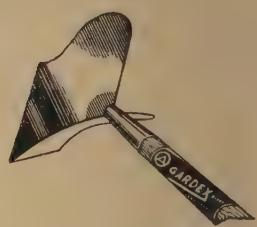
250, 4-inch size. .40c. Box of 125, 8-inch size. .40c.  
Box of 125, 16-inch size. .75c.

**'TWIST-EMS'**

**No. 200 HANDPLOW.** Makes straight furrows 2 to 6 inches deep. Steel with Gardex handle socket.

**200-6 Width 6 in. \$1.75**

**200-8 Width 8 in. 1.90**



No. 200

**No. 250 BOW RAKE.** Sturdy rake of carbon steel, reinforced bow and straight back for leveling cultivated soil. Curved teeth; good balance. **\$1.32.**



No. 250

**No. 171 AERATOR or "Ladies' Hoe".** A handy tool for loosening and air conditioning the soil. For rock gardens and flower beds. Use makes for better growth. **90c.**



No. 171

**No. 270 SMALL HAND SEEDER.** Adjustable for spacing and size of seed. Hopper removable for filling and adjusting. **\$1.20.**



No. 270

**No. 120 GARDEX DOUBLE BOW-PULL HOE.** For weeding and cultivating—cuts the toughest weeds; double bow protecting plants. High grade replaceable steel blade.

**120-7 Width of blade 7" \$1.35**

**120-8 Width of blade 8" 1.40**



No. 120

**No. 713 MIDGET CULTIVATOR.** For small beds, between rows, in hotbeds. **40c.**



No. 713

**FROST CAN'T HARM PLANTS**  
**Vegetables 3 Weeks Earlier!**



Patented paper hothouses—completely protect plants from destructive Frosts, Storms, Insects. Ripen crops 3 weeks earlier; increase yield 18% to 51%; maintain perfect Mulch. **Big Garden Pkg. of 25—only 60c. Setter Free. postpaid.**

**Hotkaps**

TRADE MARK REG.

**GERMAIN'S Germáco Products Div., Los Angeles 21**



1/2 MOON TYPE LAWN EDGER

\$1.75



WARREN PATTERN HOE  
\$1.85



GARDEN HOE \$1.60



4-TINE SPADING FORK  
Long Handle — "D" Handle



GRASS SHEARS  
\$1.89 Per Pair



SUNBEAM  
HEDGE TRIMMER

Faster, easier way to trim hedges, shrubs, trees. Cutlery-steel cutter bar; universal AC-DC power plant.

## GARDEN GLOVES

An excellent grade of soft, washable wild pig leather. Available in sizes 7, 7½, 8 and 9. \$1.35 Pair.



**SUBBURY SOIL TEST KIT.**  
Gives 20 tests for Nitrogen, Phosphorus, Potash and Acidity. Gives all essential information to produce maximum crops.  
\$2.50 Complete

**2-MINUTE KIT TESTS**  
For acidity only. \$1.00

**GRAFTEX**—Used for grafting and tree surgery.  
½ lb. 50c; 5 lb. \$4.50.

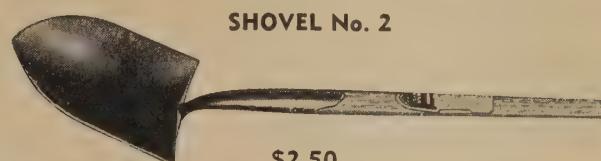


DANDELION RAKE

\$1.65

## TRUE TEMPER HEDGE SHEARS.

Made from finest quality steel, lower blade serrated.  
\$3.00 Each



SHOVEL No. 2

\$2.50



EASY CULTIVATOR — 4 PRONG

\$1.85

**WISS HIGH POWER PRUNERS.** Fine quality steel. Heavy duty pruners.  
\$2.25 Pair

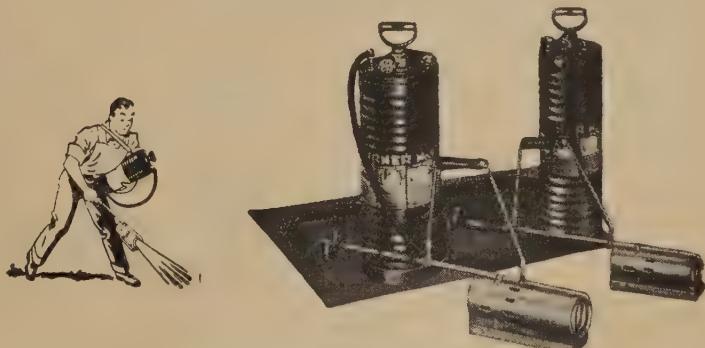


CYCLONE SEED  
SOWER

Machine is designed with extra heavy gears and brass bushed bearings for hard service and long wear.

Cyclone Sower  
\$3.50  
Postpaid \$3.75

## AEROIL WEED BURNER



Has no equal for burning weeds, tree stumps, destroying insect pests, and 100 other uses. Railroads are using these very extensively to keep their right of way free from weeds.

**Complete Equipment Includes:** 4 gal. fuel and air tank, tested at 100 lbs. and made of copper-bearing, corrugated, galvanized steel, with seams and fittings WELDED; 2 in. BRASS AIR PUMP; BRASS CHECK VALVE; PRESSURE GAUGE; 7 ft. high test oil-resisting RUBBER HOSE; seamless steel COIL BURNER, WINDSHIELD with BRONZE REGULATING VALVE. Fuels used: Kerosene, stove oil, range oil or light furnace oil.

**No. 99 Senior—23 lbs. Each \$22.00, add postage.**

## LEE'S LIVELY CHICKS

The best for more than 25 years. These chicks grow rapidly and develop early into fryers and layers that pay. Produced under the National Poultry Improvement Plan as administered by the Oregon State Department of Agriculture for U. S.-Oregon Pullorum Controlled chicks.

### PREPAID PRICES

White Leghorns (Regular) .....  
 White Leghorns (Special) .....  
 Black Minorca - White Leghorn Cross .....  
 Austra - Whites .....  
 New Hampshires .....  
 Rhode Island Reds .....  
 Barred Rocks .....  
 White Rocks .....  
 White Wyandottes .....  
 Buff Orpingtons .....

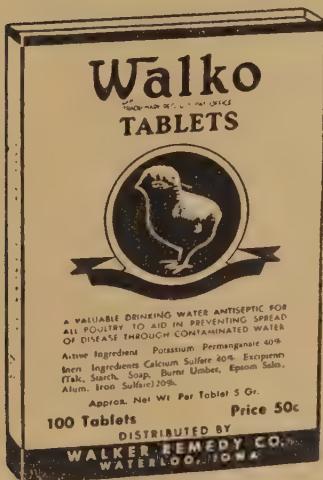
Straight Run Chicks Per 100	Day-Old Pullets Per 100
\$17.50	\$34.00
19.50	37.00
18.50	36.00
18.50	36.00
18.50	27.50
18.50	27.50
18.50	27.50
19.50	28.50
19.50	28.50
19.50	28.50

Smaller Lots Are Slightly Higher

Make Plans Now — Order Early — Buy Healthy Chicks

Ask Today for **LEE'S BABY CHICK CHATS**

Remember — No Increase in Prices



### MAGIC EGG BRUSH

45c Each



### FLOAT CONTROL VALVES

Threaded for 1/2" Pipe. Valve is controlled with a common tire valve core. Easily replaced.

\$1.30 Each



### SPIRAL LEG BAND

Size No. 5—Pigeons .....	50 for 30c
Size No. 9—Leghorns .....	50 for 35c
Size No. 11—Rocks and Reds .....	50 for 45c
Size No. 16—Turkeys .....	50 for 75c

### BROODER THERMOMETERS



50c Each

### GERMOZONE

A liquid which mixes quickly and easily in the drinking water. Offers valuable protection against many common bowel troubles and simple diarrheas. Helps prevent spread of many disease germs. This "triple action" medicine works in the drink, in the crop, and back in the intestines. Thousands of poultry men use Germozones the year around for birds of all ages. Used in any kind of fountain. 4 oz. 40c; 12 oz. 75c; 32 oz. \$1.50; 1 gal. \$4.50.



### LOUSE POWDER

For lice on poultry. A "time-tried" standard preparation. Convenient for small flocks, and even used by many large-scale raisers. Effective and economical. Sifter-can top.

1 lb. ....	\$..25
2 1/2 lbs. ....	.50

A  
**TRANSPARENT,  
FLEXIBLE,  
ALL - PURPOSE  
WINDOW  
MATERIAL**

Plastic Cloth Mesh, 1 yd. 65c; 50 ft. \$10.25  
 Plastic Mesh, 1 yd. 85c; 50 ft. \$13.50  
 Plastic Wire Mesh, 1 yd. \$1.10; 50 ft. \$18.00

All above 36" wide.

Can be used wherever glass is used. Better and cheaper than glass for poultry houses, hot and cold bed frames, storm doors and windows, and many other uses about the farm and home. Shatterproof, weatherproof. Keeps heat in, keeps cold out. Easy to put up. Easy to clean.

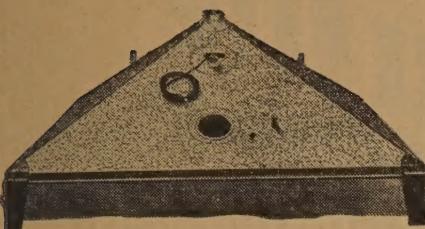
**FREELY ADMITS SUN'S HEALTH GIVING ULTRA VIOLET RAYS  
ASK FOR FREE SAMPLE**



PLEASE ADD POSTAGE TO ABOVE GOODS

# MAKOMB

# WORLD'S LARGEST BROODER BUILDER



## SENIOR ELECT-O-STAT WITH FAN FORCED CIRCULATION

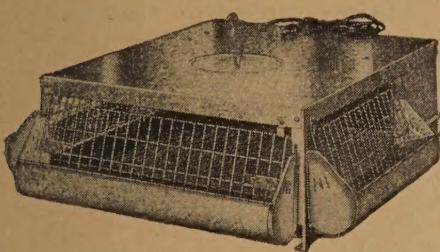
Elect-O-Stat fan forced circulation evenly diffuses the heat from corner to corner and takes less current. Fresh cool air is pulled down through the top ventilator. It moves across the Reflector, picking up any heat radiated through. It's blown over the element, then circulated outward and in part pulled back to meet and temper continual intake of fresh air. Control is by our time tried and proven snap action switch. Motor draws only 17 watts. Powered by 800 watt fully enclosed porcelain insulated element—thousands in use and not one reported defective.

Cat. No.	Price	Size	Area Covered	Capacity	Weight
C9-52	\$38.40	52" square	2704 sq. in.	385	66 lb.
C9-60	43.65	60" square	3600 sq. in.	515	80 lb.

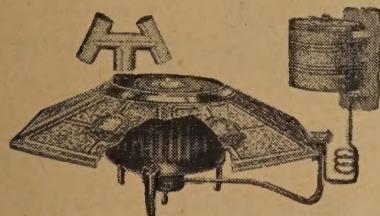
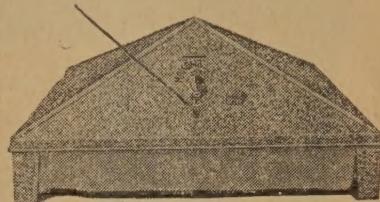
## SMALL FLOCK ELECTRIC BROODERS

Two full powered electric brooders especially designed for the smaller flocks. They carry the same tried and proven dependable units as the larger models — are as dependable as any at any price. Dependable snap action automatic control, double sealed against dust. Powered by 500 watt—15" diameter element fully enclosed in tight die drawn case. Masonite insulated.

Cat. No.	Price	Size	Broods	Weight
C1-35	\$17.35	No diffuser	200	26 lb.
C1-46	19.90	With diffuser	300	37 lb.



Raises chicks to 6 weeks old under most sanitary conditions. Screen floor 1/2" sq. mesh braced with steel rods, dropping pan 1 1/4" below. Heat is supplied by big 13" x 24"—60 watt contact heater. Size inside 24" x 36" — headroom 9 1/2" — weight 38 lbs. Cat. No. C2-20....\$14.50



## OIL-O-STAT BROODERS

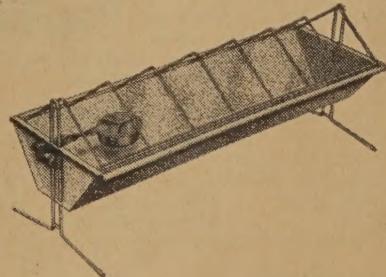
The silent Oil-O-Stats have proven highly satisfactory to thousands of users. The Saveway Pot Type Burner is of the same type used in the highest priced oil heaters for the home. Its clear, clean burning, powerful flame is more efficient, makes more heat per dollar. No moving parts, no separate parts to lose in this one-piece assembly of extra heavy steel. INVERTED SMOKE PIPE—another first for Makomb. The first Drum Brooder with the smoke collar reversed so that the pipe is installed upside down. That keeps the tarry substances (resulting from condensation) on the inside of the smoke pipe. Experienced brooder operators appreciate it.

Cat. No.	Price	Canopy	Drum Dia.	Broods	Weight
A2-1956 with London Cap	\$25.30	56"	24"	425	59 lb.
A2-1965 with London Cap	26.45	65"	24"	525	62 lb.
A2-2045 with London Cap	22.20	45"	20 1/2"	340	45 lb.
A2-2056 with London Cap	23.60	56"	20 1/2"	425	50 lb.

## FLOCK WATERERS

These troughs are hot dipped—are certain to last much longer than those made of galvanized sheet steel. The troughs are securely held in cradles from which they lift easily for cleaning. Furnished with electric heater as shown, unheated on short legs, or unheated on stand with grid guard. Electric heated model powered by 50 watt porcelain insulated element housed in heavy galvanized tube extending 15" into the trough near its bottom.

H1-102	Unheated on stand—grid guard	\$4.65
G7-77	Electric heated—as illustrated	9.20
G7-75	Trough on short legs—unheated	3.25



\$3.30

Model H6-5, above, waters broilers, hens or turkeys. The big trough is 24" long, 9" wide and 3 1/2" deep. Adjustable legs raise edge to 9" above floor. Furnished complete with special type float valve.



## ALL-AGE FEEDERS

The only feeder (at right) with patented Snap-Lok legs. Heavy galvanized steel trough 4 3/8" wide by 2 1/4" deep, with 4-vane adjustable steel reel.

H7-536—36" long ..... \$1.05 each  
H7-548—48" long ..... 1.30 each



## GLASS JAR FOUNT

Fits almost any jar securely, feeds properly. Has elevated base rim. Of flame tempered clear glass. Model H2-3 ..... 11c



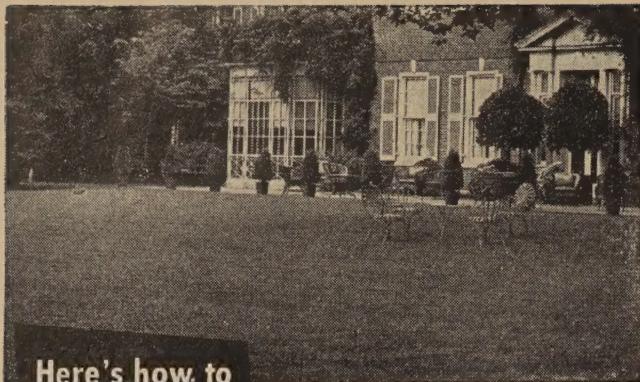
## SNAP ON JAR FOUNT

Most convenient and durable. Cannot rust tight to jar. Jar snaps off or on, is held secure by tempered leaf spring....10c



## ELECTRIC IMMERSION HEATER

Model M8-22, at left, lays right in the drinking trough. The only one for use with popular round founts having a 1 1/2" wide trough as well as open pans or troughs. Holds water at 50° to 55° automatically. Heavy tinned copper case houses 200 watt element and genuine snap action automatic switch ..... \$3.80



Here's how to  
have a more  
beautiful  
Lawn



Don't be satisfied with a sparse, spotty lawn. You can very easily have one that's "the finest in the neighborhood." Feed your lawn with Vigoro, complete plant food. Vigoro supplies all growing things with the nourishment needed from the soil. It is clean, odorless, sanitary, and easy to use! Most economical, too!

A PRODUCT OF SWIFT

VIGORO PRICES  
F. O. B.

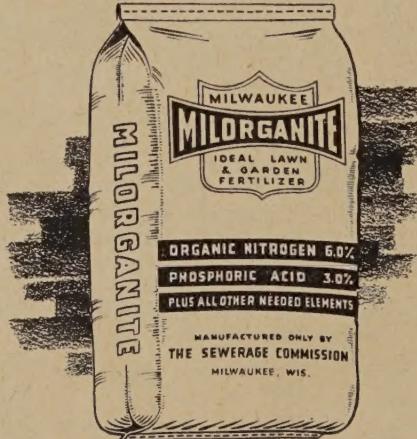
100-lb. Sack	.....	\$4.50
50-lb. "	.....	2.75
25-lb. "	.....	1.60
10-lb. pkg.	.....	.85
5-lb. "	.....	.45
1-lb. "	.....	.10

**HYPO-NE<sup>X</sup>**  
PLANT FOOD

Grows bigger, better house plants, flowers, vegetables, lawns, and trees in poorest soil—even in sand, cinders or water. Results sure. Doesn't burn. Clean, odorless, soluble powder. 1 oz. makes 6 gallons.



1 oz. packet 10c — 72 to case—wt. 7 lbs.  
3 oz. can .25c — 36 to case—wt. 12 lbs.  
7 oz. can .50c — 24 to case—wt. 14 lbs.  
1 lb. can. \$1.00 — 12 to case—wt. 16 lbs.  
10 lb. drum . . . . \$8 — 25 lbs. . . . . \$15  
50 lbs. . . . . \$25 — 100 lbs. . . . . \$40



100 lb. Bag \$3.95

**Secret of bigger, better potted plants, garden flowers, vegetables!**

Feed PLANTABBS to everything growing in your house and garden. If you don't get lovelier plants and a greater yield of finer-flavored vegetables, you get your money back. PLANTABBS are convenient, clean, odorless, highly concentrated PLANT FOOD TABLETS which help produce sturdy stems, luxuriant leaves, strong roots, gorgeous blooms, perfect form and color.

Box of 10 tablets 10c; 30 tablets 25c; 75 tablets 50c; 200 tablets \$1; 1000 tablets \$3.50.

**Fulton's  
PLANTABBS**  
PLANT FOOD TABLETS PLUS B<sub>1</sub>

**NuLife**

LAWN AND GARDEN  
FERTILIZER

Quick Acting — Long Lasting — Economical

A Complete Balanced Organic Base Fertilizer.

Contains Nitrogen, Phosphoric Acid, Potash and in addition the "RARE ELEMENTS" and Vitamins so necessary to restore the Fertility of the Soil and Promote Strong, Healthy, Vigorous Plant Growth.



LAWNS - FLOWERS - VEGETABLES  
SHRUBS - TREES

100 lbs. . . . .	\$4.50
50 lbs. . . . .	2.75
25 lbs. . . . .	1.60
10 lbs. . . . .	.85
5 lbs. . . . .	.45

A Product of  
Carstens Packing Co.  
Tacoma, Wash.

SETS TOMATO FRUIT



25c for 20 tablets, makes 20 QUARTS

**KEEPWAY TARRED PLANT PROTECTORS**  
Non-Poisonous

Protection from root maggot on Cabbage, Cauliflower, Broccoli, Brussels Sprouts, etc. Apply when setting out. Rains or cultivation do not destroy effectiveness. Protection until plant maturity. Directions on packages.

24—15c, 72—35c, 500—\$1.50, 1000—\$2.60

**KEEPWAY CUTWORM PLANT COLLARS**  
Non-Poisonous

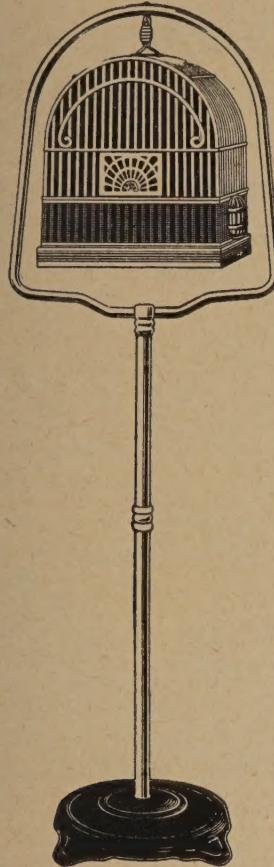
Protection from cutworms on Tomatoes, Cabbage Family, Peppers, Egg Plant and many varieties of flowers. Apply when setting out. Rains or cultivation do not destroy effectiveness. Protection until plant maturity. Can also be used as a plant band when starting seed indoors. Directions on packages.

24—20c, 48—35c, 1000—\$4.50



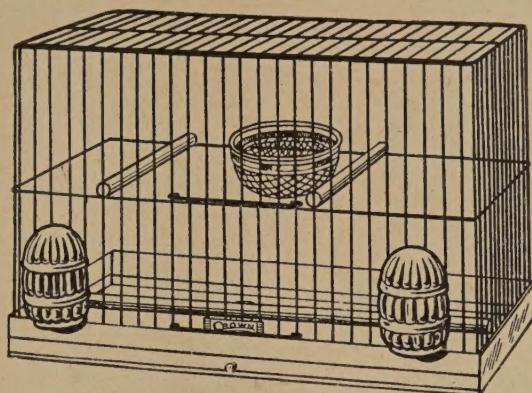
# SINGING CANARIES

Through the Fall and Winter months we have a large supply of beautiful singers. Each one guaranteed.  
YOUR INQUIRY INVITED

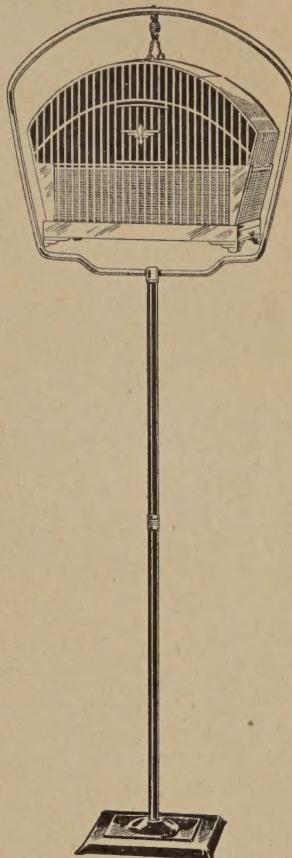


MODEL A CAGE  
\$3.50

MODEL A STAND  
\$3.50



SINGLE BREEDING CAGE  
COMPLETE \$3.45



MODEL T CAGE  
\$9.75

MODEL T STAND  
\$6.30



## DUTHIE'S BIRD SEED

DUTHIE'S Roller Canary Mix	25c lb.
DUTHIE'S Love Bird Seed	20c lb.
DUTHIE'S Regular Treat Seed	4 oz. 15c
DUTHIE'S Special Treat Seed	4 oz. 25c
DUTHIE'S Gravel with Charcoal	2 lb. 10c

## SPRATT'S

SPRATT'S Roller Canary Mix	35c
SPRATT'S Song Restorer	25c
SPRATT'S CLO Nestling Food	35c
SPRATT'S Bird Tonic	25c
SPRATT'S Love Bird Seed	30c
SPRATT'S Moultting Food	30c
SPRATT'S Color Food	25c
SPRATT'S Bird Lice Powder	30c

## MISCELLANEOUS SUPPLIES

Bird Phonograph Record	\$ .80
Bird Bath Glass	.25
Cage Cups, Outside	.10
Cage Cups, Inside	.25
Treat Cups	.06
Bird Nests	.25
Bird Nests	.20

## PETPAK PRODUCTS

Vitamin Song Seed, 14 oz.	35c
Parrakeet Seed, 1 lb. ctn.	29c
Marvel Song Food, 4 oz. jar	25c
Mineral Grit with Charcoal, 1 lb. 11 oz.	15c
Cuttle Bone	10c
Baby Bird Food, 4 oz. jar	29c
Mating Food, 4 oz. jar	25c
Nesting Hair	10c
Cod Liver Oil Egg Food, 10 oz.	25c
Bird Bitters, 2 oz.	25c
Iron Tonic, 2 oz.	25c
Bird Salve, for scaly feet	10c
Feather Pulling Remedy	25c
Parrakeet and Parrot Tonic	25c
Charcoal, 2 oz.	15c
Moultting Food, 4 oz.	25c
Color and Pepper Food, 4 oz.	25c
Vitamin Bird Bell	10c
Mite and Lice Powder	15c
Bird Wash	25c
Cage Cleaner, Mite Destroyer	25c



For Complete List of Dahlias—See Page 22

*“Our Seeds Grow Friends”*

# DUTHIE SEED COMPANY

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1101 MAIN STREET - - - LEWISTON, IDAHO